

LAMPIRAN

Lampiran 1. Data kandungan kimia dari KNApSack

Input type = all , input word = cucumis melo						
Number of matched data : 26						
CAS ID	Metabolite	Molecular formula	Mr		Organism or InChIKey etc.	
C000000001	545-93-1	Giberellin A1	C19H24O	348.1572085	Cucumis melo	
C000000003	77-08-5	Giberellin A3	C19H22O8	349.14163844	Cucumis melo	
C000000005	468-44-0	Giberellin A4	C19H24O5	332.16237388	Cucumis melo	
C000000006	561-56-8	Giberellin A5	C19H22O5	330.14672381	Cucumis melo	
C000000007	79442-43-6	Giberellin A8	C19H22O7	364.15220312	Cucumis melo	
C000000008	119-38-7	Giberellin A9	C19H22O9	364.15220308	Cucumis melo	
C000000034	32630-9-5	Giberellin A34	C19H24O8	348.1572885	Cucumis melo	
C000000356	111-27-3	Hexan-1-one	C8H14O	102.10446507	Cucumis melo	
C000000365	6040-19-3	Cucurbitacin A	C32H46O9	574.31418307	Cucumis melo	
C000000368	6199-13-2	Cucurbitacin B	C32H46O8	574.31418306	Cucumis melo	
C000000370	51-06-2	Cucurbitacin H	C30H46O8	534.31026845	Cucumis melo	
C0000006210	55196-86-8	Isorhamnetin 2'-O-glucopyranoside	C27H30O16	610.15338491	Cucumis melo	
C000056223	60767-80-8	Meloidine	C27H30O15	594.15847029	Cucumis melo	
C00029742	6524-27-0	Arvenetrol	C30H50O13	720.37209188	Cucumis melo	
C00035043	657-57-7	Arvenetrol III	C30H40O12	630.34352050	Cucumis melo	
C00035043	3477-89-2	Isocurbitacin R	C30H46O7	510.32435382	Cucumis melo	
C00047647	115141-52-0	19-Norlanosta-5,24-dien-11-one	C29H46O	410.35466609	Cucumis melo	
C00047824	751-95-1	Cucurbitacin G	C30H46O8	534.31926845	Cucumis melo	
C00047824	5390-29-8	Cucurbitacin R	C30H46O7	530.31023502	Cucumis melo	
C00047824	6355-42-2	Dimethylcucurbitacin B	C32H48O8	560.33426551	Cucumis melo	
C00054652	76258-22-7	9-Acetoxy-3-ketone	C11H20O2	184.14632988	Cucumis melo	
C00054716	83334-93-4	1-Acetoxy-3-hydroxide	C11H18O2	182.13607982	Cucumis melo	
C00055024	144889-21-4	CmCTH	C130H21N33O39S8	3118.34641015	Cucumis melo var. Comonon Makino	
C00055024	144889-21-4	CmCTH	C14H23N38O42S8	3385.47954999	Cucumis melo var. Comonon Makino	
C00056219	1276662-75-3	5,7-Dihydroxy-2-(4-hydroxyphenethyl)chromone	C17H14O5	298.08412356	Cucumis melo var. reticulatus	
C00056700	1276662-80-6	2-[2-(3,4-Dihydroxyphenyl)ethyl]-5,7-dihydroxy-4-methyl-4H-chromene	C17H14O6	314.07903818	Cucumis melo var. reticulatus	
C00056664	1135141-78-4	2,18,19,20,25-Pentahydroxycurbit-5-e-ne-3,11,22-trione	C30H46O8	534.31926845	Cucumis melo	
C00057013	13049-88-2	3-Nonen-1-yl acetate	C11H20O2	184.14632988	Cucumis melo	

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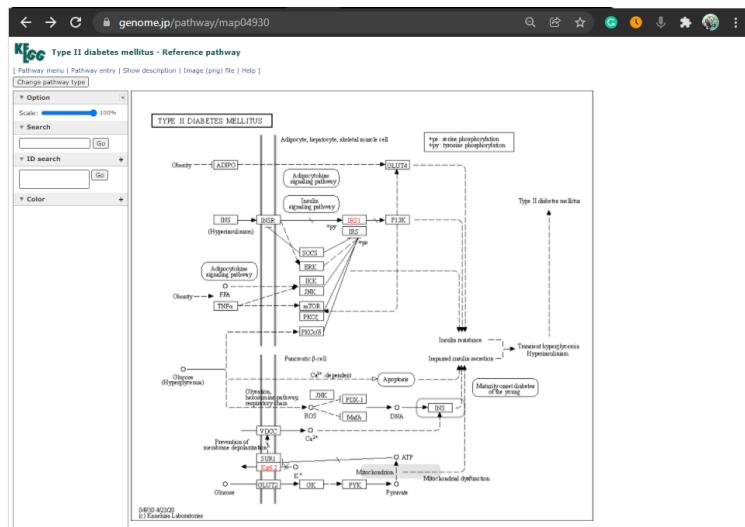
Tanaman melon (*Cucumis melo L.*)

Input type = all , input word = cucumis sativus						
Number of matched data : 49						
CAS ID	Metabolite	Molecular formula	Mr		Organism or InChIKey etc.	
S000000001	545-94-0	Giberellin A1	C19H24O	348.1572885	Cucumis sativus	
S000000002	545-95-2	Giberellin A3	C19H22O8	349.14163844	Cucumis sativus	
S000000003	488-44-0	Giberellin A4	C19H24O5	332.16237388	Cucumis sativus	
S000000005	561-56-8	Giberellin A5	C19H22O5	330.14672381	Cucumis sativus	
S000000007	79442-43-6	Giberellin A8	C19H22O7	364.15220312	Cucumis sativus	
S000000008	119-38-7	Giberellin A9	C19H22O9	364.15220308	Cucumis sativus	
S000000034	32630-9-5	Giberellin A34	C19H24O8	348.1572885	Cucumis sativus	
S000000356	111-27-3	Hexan-1-one	C8H14O	102.10446507	Cucumis sativus	
S000000365	6040-19-3	Cucurbitacin A	C32H46O9	574.31418307	Cucumis sativus	
S000000368	6199-13-2	Cucurbitacin B	C32H46O8	574.31418306	Cucumis sativus	
S000000370	51-06-2	Cucurbitacin H	C30H46O8	534.31026845	Cucumis sativus	
C00054652	76258-22-7	Dimethylcucurbitacin B	C32H48O8	560.33426551	Cucumis sativus	
C00054652	6524-27-0	9-Acetoxy-3-ketone	C11H20O2	184.14632988	Cucumis sativus	
C00054716	83334-93-4	1-Acetoxy-3-hydroxide	C11H18O2	182.13607982	Cucumis sativus	
C00055024	144889-21-4	CmCTH	C130H21N33O39S8	3118.34641015	Cucumis sativus var. Comonon Makino	
C00055024	144889-21-4	CmCTH	C14H23N38O42S8	3385.47954999	Cucumis sativus var. Comonon Makino	
C00056219	1276662-75-3	5,7-Dihydroxy-2-(4-hydroxyphenethyl)chromone	C17H14O5	298.08412356	Cucumis sativus var. reticulatus	
C00056700	1276662-80-6	2-[2-(3,4-Dihydroxyphenyl)ethyl]-5,7-dihydroxy-4-methyl-4H-chromene	C17H14O6	314.07903818	Cucumis sativus var. reticulatus	
C00056664	1135141-78-4	2,18,19,20,25-Pentahydroxycurbit-5-e-ne-3,11,22-trione	C30H46O8	534.31926845	Cucumis sativus	
C00057013	13049-88-2	3-Nonen-1-yl acetate	C11H20O2	184.14632988	Cucumis sativus	

Tanaman mentimun (*Cucumis sativus L.*)

Input type = all , input word = cucumis sativus						
Number of matched data : 49						
CAS ID	Metabolite	Molecular formula	Mr		Organism or InChIKey etc.	
S000000001	545-93-1	Giberellin A1	C19H24O	348.1572885	Cucumis sativus	
S000000002	545-95-2	Giberellin A3	C19H22O8	349.14163844	Cucumis sativus	
S000000003	488-44-0	Giberellin A4	C19H24O5	332.16237388	Cucumis sativus	
S000000005	561-56-8	Giberellin A5	C19H22O5	330.14672381	Cucumis sativus	
S000000007	79442-43-6	Giberellin A8	C19H22O7	364.15220312	Cucumis sativus	
S000000008	119-38-7	Giberellin A9	C19H22O9	364.15220308	Cucumis sativus	
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S000000356	111-27-3	Hexan-1-one	C8H14O	102.10446507	Cucumis sativus	
S000000365	6040-19-3	Cucurbitacin A	C32H46O9	574.31418307	Cucumis sativus	
S000000368	6199-13-2	Cucurbitacin B	C32H46O8	574.31418306	Cucumis sativus	
S000000370	51-06-2	Cucurbitacin H	C30H46O8	534.31026845	Cucumis sativus	
C00054652	76258-22-7	Dimethylcucurbitacin B	C32H48O8	560.33426551	Cucumis sativus	
C00054652	6524-27-0	9-Acetoxy-3-ketone	C11H20O2	184.14632988	Cucumis sativus	
C00054716	83334-93-4	1-Acetoxy-3-hydroxide	C11H18O2	182.13607982	Cucumis sativus	
C00055024	144889-21-4	CmCTH	C130H21N33O39S8	3118.34641015	Cucumis sativus var. Comonon Makino	
C00055024	144889-21-4	CmCTH	C14H23N38O42S8	3385.47954999	Cucumis sativus var. Comonon Makino	
C00056219	1276662-75-3	5,7-Dihydroxy-2-(4-hydroxyphenethyl)chromone	C17H14O5	298.08412356	Cucumis sativus var. reticulatus	
C00056700	1276662-80-6	2-[2-(3,4-Dihydroxyphenyl)ethyl]-5,7-dihydroxy-4-methyl-4H-chromene	C17H14O6	314.07903818	Cucumis sativus var. reticulatus	
C00056664	1135141-78-4	2,18,19,20,25-Pentahydroxycurbit-5-e-ne-3,11,22-trione	C30H46O8	534.31926845	Cucumis sativus	
C00057013	13049-88-2	3-Nonen-1-yl acetate	C11H20O2	184.14632988	Cucumis sativus	

Lampiran 2. Identifikasi protein target dari *pathway* DM Tipe II



Lampiran 3. Validasi nama gen dari UniProt

Entry	Entry name	Protein name	Gene names	Organism	Length
P42345	MTOR_HUMAN	Serine/threonine-protein kinase mTOR	MTOR, FRAP, FRAP1, RAPT1	Homo sapiens (Human)	2,549
Q93LN9	MTOR_MOUSE	Serine/threonine-protein kinase mTOR	Mtor, Frap, Frap1	Mus musculus (Mouse)	2,549
P42346	MTOR_RAT	Serine/threonine-protein kinase mTOR	Mtor, Frap1, Raf1	Rattus norvegicus (Rat)	2,549
Q6P9B6	MEAK7_HUMAN	MTOR-associated protein MEAK7	MEAK7, KIAA1609, TLCD1	Homo sapiens (Human)	456
Q8N122	RPTOR_HUMAN	Regulatory-associated protein of mT...	RPTOR, KIAA1303, RPTOR	Homo sapiens (Human)	1,335
Q8K4Q0	RPTOR_MOUSE	Regulatory-associated protein of mT...	Rptor, Raptor	Mus musculus (Mouse)	1,335
Q6R327	RICTOR_HUMAN	Rapamycin-insensitive companion of ...	RICTOR, KIAA1999	Homo sapiens (Human)	1,708
Q8TB45	DPTOR_HUMAN	DEP domain-containing mTOR-interact...	DEPTOR, DEPD6	Homo sapiens (Human)	409
Q6QI05	RICTOR_MOUSE	Rapamycin-insensitive companion of ...	Rictor, KIAA1999	Mus musculus (Mouse)	1,708
Q9UPX6	MNAR1_HUMAN	Major intrinsically disordered Not...	MNAR1, KIAA1024, UBTOR	Homo sapiens (Human)	916
E2R2L2	E2R2L2_CANLF	Serine/threonine-protein kinase mTOR	MTOR	Canis lupus familiaris (Dog) (Canis familiaris)	2,647
F1RHR8	F1RHR8_PIG	Serine/threonine-protein kinase mTOR	MTOR	Sus scrofa (Pig)	2,548

mTOR (*Serine/threonine-protein kinase mTOR*)

UniProtKB 2021_04 results

Filter by:	Entry	Entry name	Protein names	Gene names	Organism	Length
Reviewed (284)	O14920	IKKB_HUMAN	Inhibitor of nuclear factor kappa-B...	IKBKB	Homo sapiens (Human)	756
Unreviewed (20,508)	O88351	IKKB_MOUSE	Inhibitor of nuclear factor kappa-B...	Ikbb	Mus musculus (Mouse)	757
Popular organisms	Q5KV0	IKKB_BOVIN	Inhibitor of nuclear factor kappa-B...	IKBKB	Bos taurus (Bovine)	756
Human (96)	Q9QY78	IKKB_RAT	Inhibitor of nuclear factor kappa-B...	Ikbb	Rattus norvegicus (Rat)	757
Mouse (74)	Q96Q05	TRPC9_HUMAN	Trafficking protein particle comple...	TRPPC9	Homo sapiens (Human)	1,148
Rat (35)	Q3U0M1	TRPC9_MOUSE	Trafficking protein particle comple...	Trppc9	Mus musculus (Mouse)	1,148
Bovine (33)	Q5D0E0	Q5D0E0_MOUSE	I-kappa-B kinase	Ikbkb	Mus musculus (Mouse)	757
Zebrafish (9)	A0A3Q2H8X2	A0A3Q2H8X2_HORSE	I-kappa-B kinase	IKBKB	Equus caballus (Horse)	770
Other organisms	Q7UQ0	IKP_HUMAN	Inhibitor of nuclear factor kappa-B...	IKBIP	Homo sapiens (Human)	350
Search terms	Q9VIL0	BRUN_DROME	Protein brunelleschi	brun	Drosophila melanogaster (Fruit fly)	1,320
Filter "ikbb" as: gene name (692)	ASA57	ASA57_PIG	I-kappa-B kinase	IKBKB	Sus scrofa (Pig)	755
protein name (257)	H2QW34	H2QW34_PANTR	I-kappa-B kinase	IKBKB	Pan troglodytes (Chimpanzee)	763
View by	F6SHC1	F6SHC1_MACMU	I-kappa-B kinase	IKBKB	Macaca mulatta (Rhesus macaque)	756
Results table	F6ZE58	F6ZE58_ORNAN	I-kappa-B kinase	IKBKB	Ornithorhynchus anatinus	757

IKBKB/IKKB (*Inhibitor of nuclear factor Kappa-B Kinase subunit Beta/ I-kappa-B kinase beta*)

UniProtKB 2021_04 results

Filter by:	Entry	Entry name	Protein names	Gene names	Organism	Length
Reviewed (63)	P53779	MK10_HUMAN	Mitogen-activated protein kinase 10	MAPK10 JNK3, JNK3A, PRKMK10, SAPK1B	Homo sapiens (Human)	464
Unreviewed (1,066)	Q61831	MK10_MOUSE	Mitogen-activated protein kinase 10	Mapk10 Jnk3, Prkm10	Mus musculus (Mouse)	464
Popular organisms	P49187	MK10_RAT	Mitogen-activated protein kinase 10	Mapk10 Jnk2, Prkm10	Rattus norvegicus (Rat)	464
Human (92)	A0A0R4IKK9	A0A0R4IKK9_DANRE	Stress-activated protein kinase JNK	Mapk10	Danio rerio (Zebrafish)	472
Mouse (28)	E9QN59	E9QN59_MOUSE	Stress-activated protein kinase JNK	Mapk10	Mus musculus (Mouse)	494
Rat (16)	Q32LVO	Q32LVO_DANRE	Stress-activated protein kinase JNK	Mapk10	Danio rerio (Zebrafish)	430
Bovine (8)	A0A0R4IB91	A0A0R4IB91_DANRE	Stress-activated protein kinase JNK	Mapk10	Danio rerio (Zebrafish)	433
Zebrafish (7)	A0A0R4IB98	A0A0R4IB98_DANRE	Stress-activated protein kinase JNK	Mapk10	Danio rerio (Zebrafish)	384
Other organisms	A4QP40	A4QP40_DANRE	Stress-activated protein kinase JNK	Mapk10	Danio rerio (Zebrafish)	384
Search terms	A0A0R4IN30	A0A0R4IN30_DANRE	Stress-activated protein kinase JNK	Mapk10	Danio rerio (Zebrafish)	210
Filter "mapk10" as: gene name (1,011)	F1PMN2	F1PMN2_CANLF	Stress-activated protein kinase JNK	MAPK10	Canis lupus familiaris (Dog)	467
protein name (61)	K7GP94	K7GP94_PIG	Stress-activated protein kinase JNK	MAPK10	Sus scrofa (Pig)	473
View by	A0A37ST22	A0A37ST22_FELCA	Stress-activated protein kinase JNK	MAPK10	Felis catus (Cat)	426
Results table	A4FV00	A4FV00_BOVIN	Stress-activated protein MAPK10	MAPK10	Bos taurus (Bovine)	426
Taxonomy						

MAPK10/JNK3 (*Mitogen-activated protein kinase 10/ c-Jun N-terminal kinase 3*)

UniProtKB 2021_04 results

Filter by	Entry	Entry name	Protein names	Gene names	Organism	Length
Reviewed (1,030) Semi-Prot	P26482	MK01_HUMAN	Mitogen-activated protein kinase 1	MAPK1 ERK2, PRKM1, PRK1	Homo sapiens (Human)	360
Unreviewed (3,526) TrEMBL	P63085	MK01_MOUSE	Mitogen-activated protein kinase 1	Mapk1 Erk2, Mapk, Prkm1	Mus musculus (Mouse)	358
Popular organisms	P63086	MK01_RAT	Mitogen-activated protein kinase 1	Mapk1 Erk2, Mapk, Prkm1	Rattus norvegicus (Rat)	358
Human (269)	P46196	MK01_BOVIN	Mitogen-activated protein kinase 1	MAPK1 ERK2, PRKM1	Bos taurus (Bovine)	360
Mouse (217)	P26696	MK01_XENLA	Mitogen-activated protein kinase 1	mapk1 mpk1	Xenopus laevis (African clawed frog)	361
Rat (137)	E2R2N2	E2R2N2_CANLF	Mitogen activated protein kinase	MAPK1	Canis lupus familiaris (Dog) (Canis familiaris)	360
Bovine (59)	Q8ND0C	MISSL_HUMAN	MAPK-interacting and spindle-stabil...	MAPK1IP1 C14orf32	Home sapiens (Human)	245
Zebrafish (44)	Q1HB34	Q1HB34_HUMAN	Mitogen-activated protein kinase	MAPK1 hCG_32557	Homo sapiens (Human)	360
Other organisms	H2QLB4	H2QLB4_PANTR	Mitogen-activated protein kinase	MAPK1	Pan troglodytes (Chimpanzee)	360
Search terms	F7ECR3	F7ECR3_MACMU	Mitogen-activated protein kinase	MAPK1	Macaca mulatta (Rhesus macaque)	360
Filter "mapk1" as gene name (1,050)	Q9H706	GARE1_HUMAN	GRB2-associated and regulator of MAP...	GAREM1 C18orf11, FAM59A, GAREM	Homo sapiens (Human)	876
protein name (345)	Q5Z9J0	MPK12_ORYSJ	Mitogen-activated protein kinase 12	MPK12 BWMK1, MAPK1, Oso6g0708000, LOC_Os06g09430, P0621D05.40-1	Oryza sativa subsp. japonica (Rice)	580
View by	Results table					
Taxonomy						

MAPK1/ERK2 (*Mitogen-activated protein kinase 1/ Extracellular signal-regulated kinase 2*)

UniProtKB 2021_04 results

Filter by	Entry	Entry name	Protein names	Gene names	Organism	Length
Reviewed (205) Semi-Prot	Q05513	KPC2_HUMAN	Protein kinase C zeta type	PRKCZ PKC2	Homo sapiens (Human)	592
Unreviewed (687) TrEMBL	P09217	KPC2_RAT	Protein kinase C zeta type	Prkcz	Rattus norvegicus (Rat)	592
Popular organisms	Q02956	KPC2_MOUSE	Protein kinase C zeta type	Prkcz	Mus musculus (Mouse)	592
Human (73)	O19111	KPC2_RABIT	Protein kinase C zeta type	PRKCZ	Oryctolagus cuniculus (Rabbit)	591
Mouse (53)	F6XMN6	F6XMN6_CANLF	Protein kinase C	PRKCZ	Canis lupus familiaris (Dog) (Canis familiaris)	591
Rat (36)	A0A3Q1MSP9	A0A3Q1MSP9_BOVIN	Protein kinase C	PRKCZ	Bos taurus (Bovine)	596
Bovine (19)	E1BQN6	E1BQN6_CHICK	Protein kinase C	PRKCZ	Gallus gallus (Chicken)	592
Zebrafish (8)	I3LU84	I3LU84_PIG	Protein kinase C	PRKCZ	Sus scrofa (Pig)	629
Other organisms	F6ZZK4	F6ZZK4_MACMU	Protein kinase C	PRKCZ	Macaca mulatta (Rhesus macaque)	592
Search terms	A0A3Q2HRQ4	A0A3Q2HRQ4_HORSE	Protein kinase C	PRKCZ	Equus caballus (Horse)	591
Filter "prkc2" as gene name (639)	B05477	B05477_DANRE	Protein kinase C	prkcz	Danio rerio (Zebrafish) (Brachydanio rerio)	599
protein name (33)	Q4JG04	Q4JG04_DANRE	Protein kinase C	prkcz	Danio rerio (Zebrafish) (Brachydanio rerio)	599
View by	Results table					
Taxonomy	Q0A5FSXLM2	Q0A5FSXLM2_FELCA	Protein kinase C zeta	PRKCZ	Felis catus (Cat) (Felis silvestris catus)	649
	G3RB70	G3RB70_GORGO	Protein kinase C	PRKCZ	Gorilla gorilla gorilla (Western)	592

PRKCZ/PKC2 (*Protein kinase C zeta type/Protein kinase C 2*)

uniprot.org/uniprot/?query=socs1&sort=score

UniProtKB 2021_04 results

Filter by:

- Reviewed (87)
- Unreviewed (1,012)
- Popular organisms
- Human (31)
- Mouse (25)
- Rat (11)
- Bovine (6)
- Zebrafish (2)
- Other organisms

Search terms

Filter "socs1" as: gene name (701)

protein family (3)

protein name (546)

View by:

Results table

Entry Entry name Protein names Gene names Organism Length

Entry	Entry name	Protein names	Gene names	Organism	Length
O15524	SOCS1_HUMAN	Suppressor of cytokine signaling 1	SOCS1 SOCS1	Homo sapiens (Human)	211
O35716	SOCS1_MOUSE	Suppressor of cytokine signaling 1	SoCs1 Cish1	Mus musculus (Mouse)	212
Q9QX78	SOCS1_RAT	Suppressor of cytokine signaling 1	Socs1	Rattus norvegicus (Rat)	212
Q6DEF9	Q6DEF9_DANRE	Socs1 protein	soCs1 SOCS1	Danio rerio (Zebrafish) [Brachydanio rerio]	201
E7CR04	E7CR04_PIG	Suppressor of cytokine signaling 1	SOCS1 soCs1	Sus scrofa (Pig)	220
H2QAK6	H2QAK6_PANTR	Suppressor of cytokine signaling 1	SOCS1	Pan troglodytes (Chimpanzee)	211
G3RFJ2	G3RFJ2_GORGO	Suppressor of cytokine signaling 1	SOCS1	Gorilla gorilla gorilla (Western lowland gorilla)	211
F1PLC4	F1PLC4_CANLF	Suppressor of cytokine signaling 1	SOCS1	Canis lupus familiaris (Dog) (Canis familiaris)	197
F1MSN0	F1MSN0_BOVIN	Suppressor of cytokine signaling 1	SOCS1	Bos taurus (Bovine)	223
F7GGH3	F7GGH3_MACMU	Suppressor of cytokine signaling 1	SOCS1	Macaca mulatta (Rhesus macaque)	215
A0A327SQG2	A0A327SQG2_FELCA	Suppressor of cytokine signaling 1	SOCS1	Felis catus (Cat) (Felis silvestris catus)	203
F6SF14	F6SF14_HORSE	Suppressor of cytokine signaling 1	SOCS1	Equus caballus (Horse)	222
B6RCQ2	B6RCQ2_CHICK	Suppressor of cytokine signaling 1	SOCS1	Gallus gallus (Chicken)	207
V9OSU6	V9OSU6_SALSA	Suppressor of cytokine signaling 1	SOCS1	Salmo salar (Atlantic salmon)	226

SOCS1 (*Suppressor of cytokine signaling 1*)

uniprot.org/uniprot/?query=irs1&sort=score

UniProtKB 2021_04 results

Filter by:

- Reviewed (232)
- Unreviewed (1,145)
- Popular organisms
- Human (69)
- Mouse (50)
- Rat (36)
- Bovine (18)
- Fruit fly (2)
- Other organisms

Search terms

Filter "irs1" as: gene name (630)

protein name (525)

View by:

Results table

Entry Entry name Protein names Gene names Organism Length

Entry	Entry name	Protein names	Gene names	Organism	Length
P35570	IRS1_RAT	Insulin receptor substrate 1	Irs1 Irs-1	Rattus norvegicus (Rat)	1,235
P35569	IRS1_MOUSE	Insulin receptor substrate 1	Irs1 Irs-1	Mus musculus (Mouse)	1,233
P35568	IRS1_HUMAN	Insulin receptor substrate 1	IRS1	Homo sapiens (Human)	1,242
Q3SY84	K2C71_HUMAN	Keratin, type II cytoskeletal 71	KRT71 KERBS1, Kb24, KRT1bRS1	Homo sapiens (Human)	523
Q9R0HS	K2C71_MOUSE	Keratin, type II cytoskeletal 71	Krt71 Kérts1, Krt24, Krt2-6g, Krt7	Mus musculus (Mouse)	524
Q8VDD9	PHP_MOUSE	PH-interacting protein	Phip Ndp, Phip1, Wdr11	Mus musculus (Mouse)	1,821
Q8WWQ0	PHP_HUMAN	PH-interacting protein	PHP DCAF14, WDR11	Homo sapiens (Human)	1,821
Q72ZD0	K1C25_HUMAN	Keratin, type I cytoskeletal 25	KRT25 KRT25A	Homo sapiens (Human)	450
P09715	IRS1_HCMVA	Protein IRS1	IRS1	Human cytomegalovirus (strain AD169) (HHV-5) (Human herpesvirus 5)	846
Q6SW04	IRS1_HCHMV	Protein IRS1	IRS1	Human cytomegalovirus (strain Merlin) (HHV-5) (Human herpesvirus 5)	847
Q91615	IRS1A_XENLA	Insulin receptor substrate 1-A	Irs1-a	Xenopus laevis (African clawed frog)	885
Q28224	IRS1_CHLAE	Insulin receptor substrate 1	IRS1	Chlorocebus aethiops (Green monkey) (Cercopithecus	1,251

IRS1 (*Insulin receptor substrate 1*)

UniProtKB 2021_04 results

Entry	Entry name	Protein name	Gene name	Organism	Length
Q9PVZ4	INSR_XENLA	Insulin receptor	insr	Xenopus laevis (African clawed frog)	1,362
P06213	INSR_HUMAN	Insulin receptor	INSR	Homo sapiens (Human)	1,382
P15208	INSR_MOUSE	Insulin receptor	Insr	Mus musculus (Mouse)	1,372
P15127	INSR_RAT	Insulin receptor	Insr	Rattus norvegicus (Rat)	1,383
T2CB11	T2CB11_RAT	Tyrosine-protein kinase receptor	Insr rCG_58966	Rattus norvegicus (Rat)	1,384
J9NY09	J9NY09_CANLF	Tyrosine-protein kinase receptor	INSR	Canis lupus familiaris (Dog) (Canis familiaris)	1,406
A0A2I2UE37	A0A2I2UE37_FELCA	Tyrosine-protein kinase receptor	INSR	Felis catus (Cat) (Felis silvestris catus)	1,381
A0A2I3RFV3	A0A2I3RFV3_PANTR	Tyrosine-protein kinase receptor	INSR	Pan troglodytes (Chimpanzee)	1,408
F1MV64	F1MV64_BOVIN	Tyrosine-protein kinase receptor	INSR	Bos taurus (Bovine)	1,387
F6RLJ3	F6RLJ3_HORSE	Tyrosine-protein kinase receptor	INSR	Equus caballus (Horse)	1,382
F15CLO	F15CLO_PIG	Tyrosine-protein kinase receptor	INSR	Sus scrofa (Pig)	1,382
Q28516	INSR_MACMU	Insulin receptor	INSR	Macaca mulatta (Rhesus macaque)	210
E2RPM8	E2RPM8_CANLF	Tyrosine-protein kinase receptor	INSR	Canis lupus familiaris (Dog) (Canis familiaris)	1,394
HOYQ96	HOYQ96_TAEGU	Tyrosine-protein kinase receptor	INSR	Taeniopterygia guttata (Zebra finch)	1,323

INSR (*Insulin receptor*)

UniProtKB 2021_04 results

Entry	Entry name	Protein name	Gene name	Organism	Length
P42336	PK3CA_HUMAN	Phosphatidylinositol 4,5-bisphosphate 3-kinase catalytic subunit alpha isoform	PIK3CA	Homo sapiens (Human)	1,068
P42337	PK3CA_MOUSE	Phosphatidylinositol 4,5-bisphosphate 3-kinase catalytic subunit alpha isoform	Pik3ca	Mus musculus (Mouse)	1,068
P22871	PK3CA_BOVIN	Phosphatidylinositol 4,5-bisphosphate 3-kinase catalytic subunit alpha isoform	PIK3CA	Bos taurus (Bovine)	1,068
AOA0G2K344	PK3CA RAT	Phosphatidylinositol 4,5-bisphosphate 3-kinase catalytic subunit alpha isoform	Pik3ca	Rattus norvegicus (Rat)	1,068
AOA2I3T7A8	AOA2I3T7A8_PANTR	Phosphatidylinositol 4,5-bisphosphate 3-kinase catalytic subunit alpha isoform	PIK3CA	Pan troglodytes (Chimpanzee)	1,034
F1Q3M8	F1Q3M8_CANLF	Phosphatidylinositol 4,5-bisphosphate 3-kinase catalytic subunit alpha isoform	PIK3CA	Canis lupus familiaris (Dog) (Canis familiaris)	978
F6VF18	F6VF18_HORSE	Phosphatidylinositol 4,5-bisphosphate 3-kinase catalytic subunit alpha isoform	PIK3CA	Equus caballus (Horse)	1,068
H9FVU5	H9FVU5_MACMU	Phosphatidylinositol 4,5-bisphosphate 3-kinase catalytic subunit alpha isoform	PIK3CA	Macaca mulatta (Rhesus macaque)	1,068
AOA2I2UYM7	AOA2I2UYM7_FELCA	Phosphatidylinositol 4,5-bisphosphate 3-kinase catalytic subunit alpha isoform	PIK3CA	Felis catus (Cat) (Felis silvestris catus)	1,068
AOA5K1UB41	AOASK1UB41_PIG	Phosphatidylinositol 4,5-bisphosphate 3-kinase catalytic subunit alpha isoform	PIK3CA	Sus scrofa (Pig)	1,068
G1KOE7	G1KOE7_ANOCA	Phosphatidylinositol 4,5-bisphosphate 3-kinase catalytic subunit alpha isoform	PIK3CA	Anolis carolinensis (Green anole) (American chameleon)	1,068
F6SW23	F6SW23_CHICK	Phosphatidylinositol 4,5-bisphosphate 3-kinase catalytic subunit alpha isoform	PIK3CA	Galus gallus (Chicken)	1,068
F7DUD6	F7DUD6_ORNAN	Phosphatidylinositol 4,5-bisphosphate 3-kinase catalytic subunit alpha isoform	PIK3CA	Omithorhynchus anatinus (Duckbill platypus)	1,068
G3R1S6	G3R1S6_GORGO	Phosphatidylinositol 4,5-bisphosphate 3-kinase catalytic subunit alpha isoform	PIK3CA	Gorilla gorilla gorilla (Western)	1,068

PIK3CA/PI3K (*Phosphatidylinositol 4,5-bisphosphate 3-kinase catalytic subunit alpha isoform/ Phosphatidylinositol 4,5-bisphosphate 3-kinase*)

alpha isoform/ Phosphatidylinositol 4,5-bisphosphate 3-kinase)

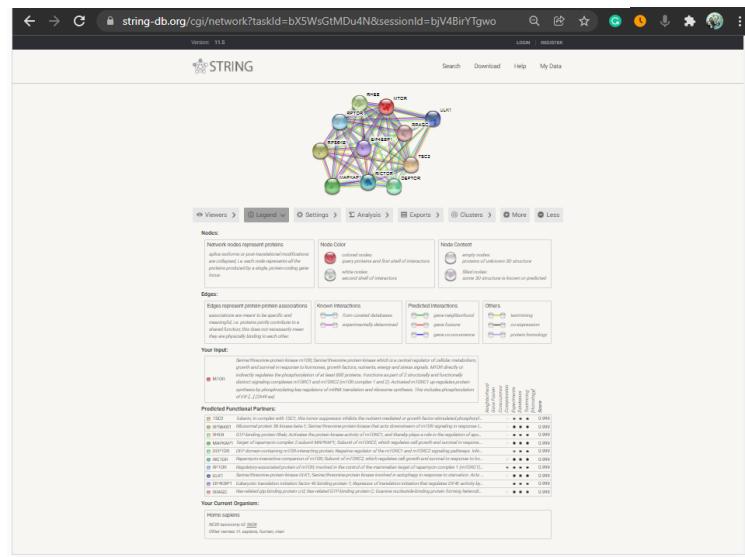
UniProtKB 2021_04 results

	Entry	Entry name	Protein name	Gene name	Organism	Length
Swiss-Prot	Q9H83	S2A4_HUMAN	SLC2A4 regulator	SLC2A4RG	Homo sapiens (Human)	387
Unreviewed (1,153) (16MB)	P14672	GLUT4_HUMAN	Solute carrier family 2, facilitate...	SLC2A4 GLUT4	Homo sapiens (Human)	509
Human (112)	P14142	GLUT4_MOUSE	Solute carrier family 2, facilitate...	Slc2a4 Glut4	Mus musculus (Mouse)	509
Mouse (54)	Q27994	GLUT4_BOVIN	Solute carrier family 2, facilitate...	SLC2A4 GLUT4	Bos taurus (Bovine)	509
Rat (35)	P19357	GLUT4_RAT	Solute carrier family 2, facilitate...	Slc2a4 Glut4	Rattus norvegicus (Rat)	509
Bovine (18)	Q9XT10	GLUT4_PIG	Solute carrier family 2, facilitate...	SLC2A4 GLUT4	Sus scrofa (Pig)	174
Zebrafish (3)	Q9XST2	GLUT4_CANLF	Solute carrier family 2, facilitate...	SLC2A4 GLUT4	Canis lupus familiaris (Dog)	162
Other organisms	Q8MJ15	Q8MJ15_HORSE	Glucose transporter type 4, insulin...	SLC2A4 GLUT4	Equus caballus (Horse)	509
	F1Q292	F1Q292_CANLF	Glucose transporter type 4, insulin...	SLC2A4	Canis lupus familiaris (Dog) (Canis familiaris)	510
	M3VZM9	M3VZM9_FELCA	Glucose transporter type 4, insulin...	SLC2A4	Felis catus (Cat) (Felis silvestris catus)	585
	F1RF44	F1RF44_PIG	Glucose transporter type 4, insulin...	SLC2A4	Sus scrofa (Pig)	509
	A0ASF4DA15	A0ASF4DA15_CANLF	Glucose transporter type 4, insulin...	SLC2A4	Canis lupus familiaris (Dog) (Canis familiaris)	553
	7F3ZB	7F3ZB_MACMU	Glucose transporter type 4, insulin...	SLC2A4	Macaca mulatta (Rhesus macaque)	541
	A0A4W2GV70	A0A4W2GV70_BOBOX	Glucose transporter type 4, insulin...	SLC2A4	Bos indicus x Bos taurus (Hybrid)	569

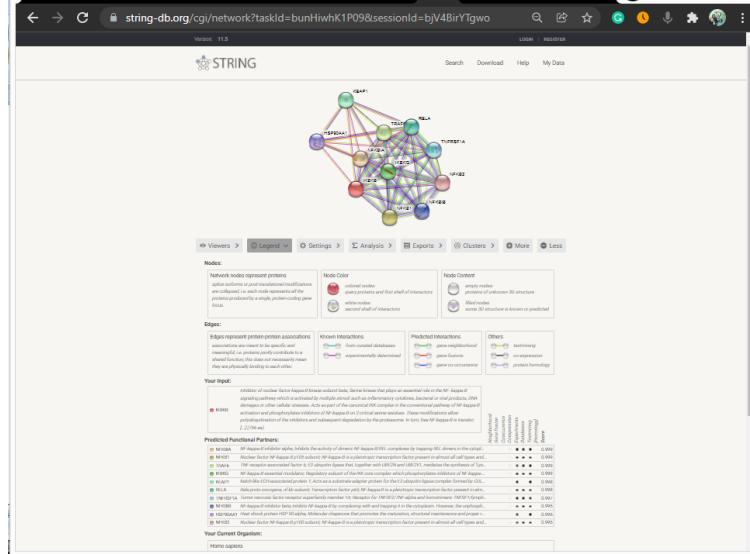
SLC2A4/GLUT4 (*Solute carrier family 2, facilitated glucose transporter member*

4/ *Glucose transporter type 4*)

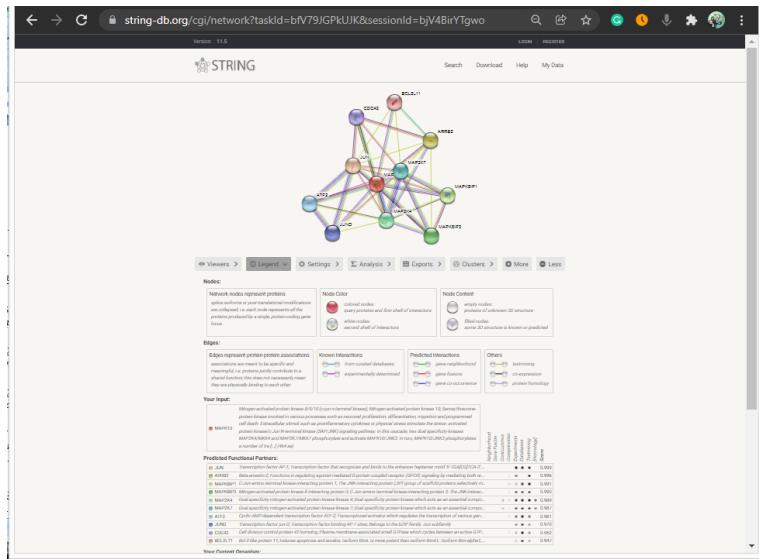
Lampiran 4. Interaksi protein-protein dari STRING



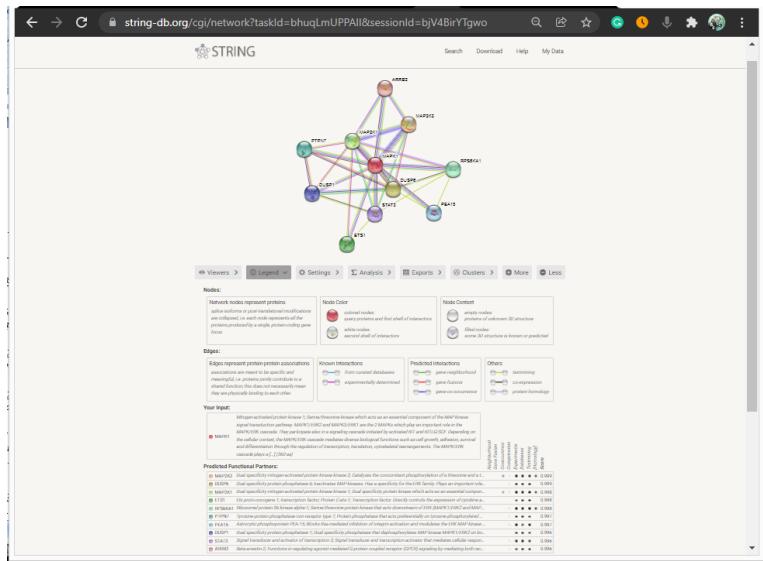
mTOR (*Serine/threonine-protein kinase mTOR*)



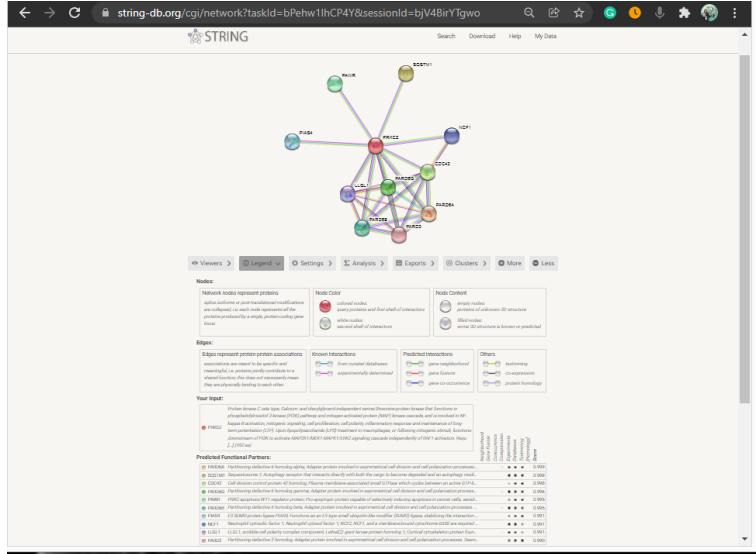
IKBKB/IKKB (Inhibitor of nuclear factor kappa-B kinase subunit beta/ I-kappa-B kinase beta)



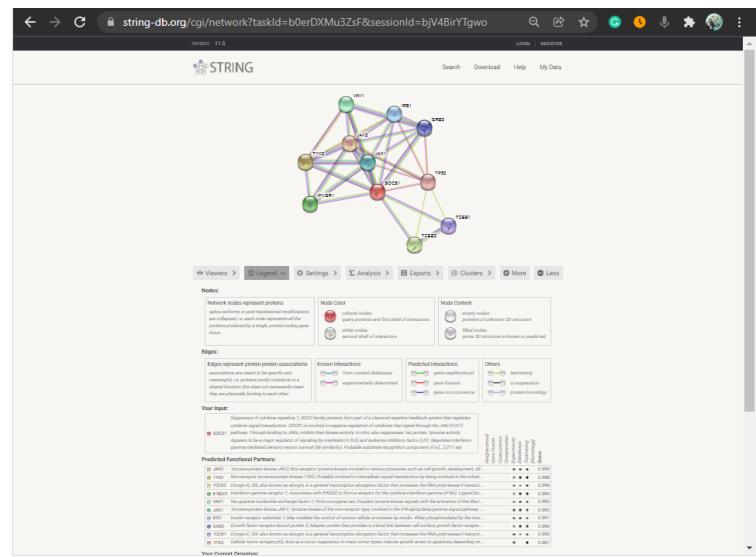
MAPK10/JNK3 (*Mitogen-activated protein kinase 10/ c-Jun N-terminal kinase 3*)



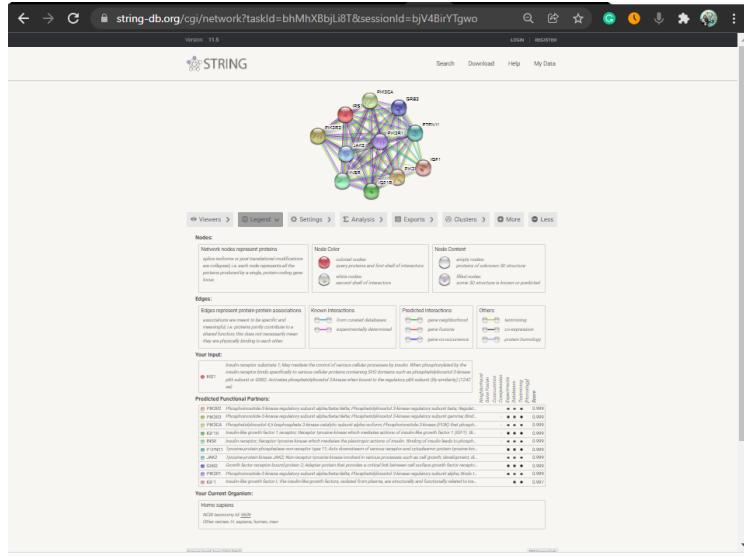
MAPK1/ERK2 (*Mitogen-activated protein kinase 1/ Extracellular signal-regulated kinase 2*)



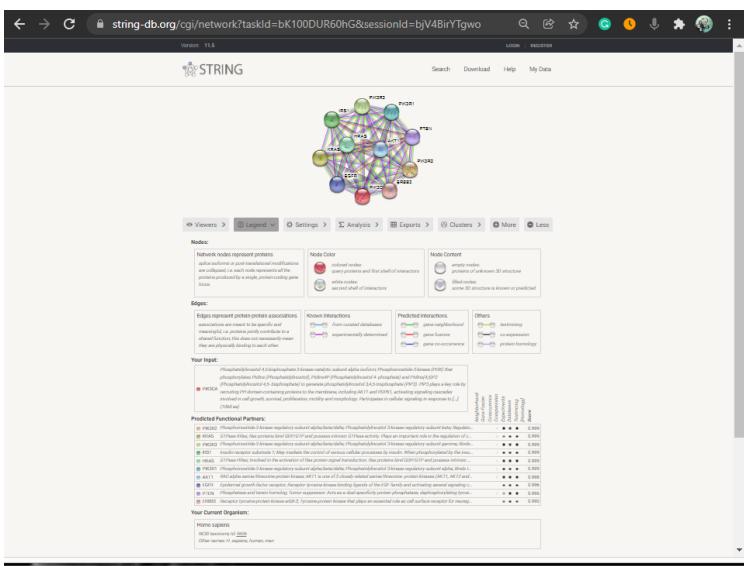
PRKCZ/PKC2 (*Protein kinase C zeta type/Protein kinase C 2*)



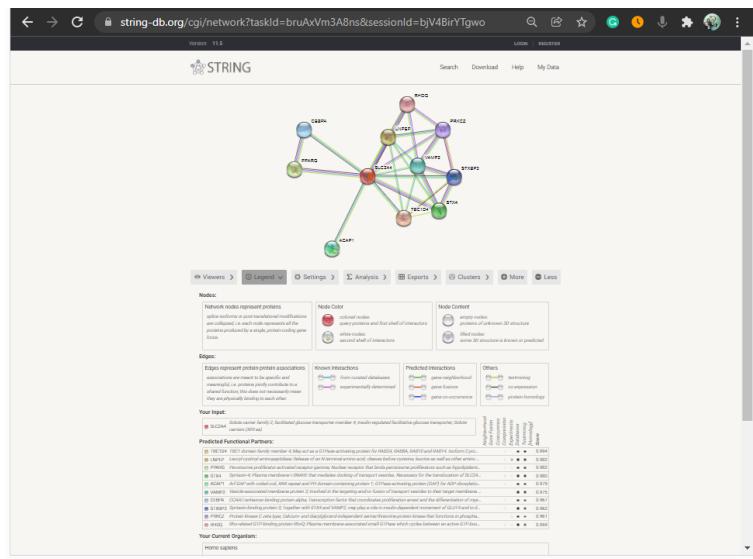
SOCS1 (*Suppressor of cytokine signaling 1*)



IRS1 (*Insulin receptor substrate 1*)



PIK3CA/PI3K (*Phosphatidylinositol 4,5-bisphosphate 3-kinase catalytic subunit alpha isoform/ Phosphatidylinositol 4,5-bisphosphate 3-kinase*)



SLC2A4/GLUT4 (*Solute carrier family 2, facilitated glucose transporter member 4/ Glucose transporter type 4*)

Lampiran 5. Visualisasi profil *network pharmacology* dari software Cytoscape v. 3.8.2

