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Product datasheet for TP301820L

SAE1 (NM_005500) Human Recombinant Protein

Product data:

Product Type:	Recombinant Proteins
Description:	Recombinant protein of human SUMO1 activating enzyme subunit 1 (SAE1), transcript variant 1, 1 mg
Species:	Human
Expression Host:	HEK293T
Expression cDNA Clone or AA Sequence:	>RC201820 protein sequence Red=Cloning site Green=Tags(s) MVEKEEAGGGISEEEAAQYDRQIRLWGLEAQKRLRASRVLLVGLKGLGAEIAKNLILAGVKGLTMLDHEQ VTPEDPGAQFLIRTGSVGRNRAEASLERAQNLNPMVDVKVDTEDIEKKPESFFTQFDAVCLTCCSRDVIV KVDQICHKNSIKFFTGDVFGYHGYTFANLGEHEFVEEKTKVAKVSQGVEDGPDTKRAKLDSSETTMVKKK VVFCPVKEALEVDWSSEKAKAALKRTTSDYFLLQVLLKFRTDKGRDPSSDTYEEDSELLLQIRNDVLDSL GISPDLLPEDFVRYCFSEMAPVCAVVGGILAQEIVKALSQRDPPHNNFFFFDGMKGNGIVECLGPK TRTRPLEQKLISEEDLAANDILDYKDDDDKV
Tag:	C-Myc/DDK
Predicted MW:	38.3 kDa
Concentration:	>0.1 µg/µL as determined by microplate BCA method
Purity:	> 80% as determined by SDS-PAGE and Coomassie blue staining
Buffer:	25 mM Tris-HCl, 100 mM glycine, pH 7.3, 10% glycerol
Bioactivity:	ELISA capture for autoantibodies (PMID:28298642)
Preparation:	Recombinant protein was captured through anti-DDK affinity column followed by conventional chromatography steps.
Note:	For testing in cell culture applications, please filter before use. Note that you may experience some loss of protein during the filtration process.
Storage:	Store at -80°C.
Stability:	Stable for 12 months from the date of receipt of the product under proper storage and handling conditions. Avoid repeated freeze-thaw cycles.
RefSeq:	NP_005491

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Locus ID: 10055

UniProt ID: Q9UBE0, A0A024R0R4

RefSeq Size: 2538

Cytogenetics: 19q13.32

RefSeq ORF: 1038

Synonyms: AOS1; HSPC140; SUA1; UBLE1A

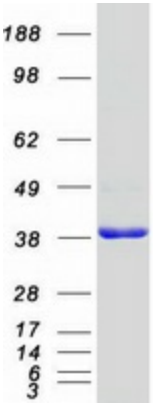
Summary: Posttranslational modification of proteins by the addition of the small protein SUMO (see SUMO1; MIM 601912), or sumoylation, regulates protein structure and intracellular localization. SAE1 and UBA2 (MIM 613295) form a heterodimer that functions as a SUMO-activating enzyme for the sumoylation of proteins (Okuma et al., 1999 [PubMed 9920803]). [supplied by OMIM, Mar 2010]

Protein Pathways: Ubiquitin mediated proteolysis

Product images:

	Patient											
Features	1	2	3	4	5	6	7	8	9	10	11	12
Onset age	82	48	58	48	54	73	45	53	57	55	68	68
Age at diagnosis	82	48	58	48	55	73	45	67	57	55	68	69
Follow up time (months)	36	8	21	12	40	30	NA	8	21	NA	NA	2.5
Gender	F	M	F	M	F	F	F	F	F	F	F	M
Heliotrope sign	Y	Y	Y	Y	Y	Y	N	N	N	Y	Y	Y
V sign	N	Y	Y	N	Y	Y	N	N	N	Y	Y	N
Gottron's sign	Y	N	Y	Y	Y	N	Y	Y	Y	N	Y	Y
Shawl sign	Y	Y	Y	N	N	Y	Y	N	N	N	Y	N
Mechanic's hands	Y	N	N	N	N	Y	Y	Y	Y	N	N	Y
Diffuse skin rash	Y	Y	Y	Y	Y	N	N	Y	N	Y	Y	Y
Skin ulceration	Y	Y	Y	Y	Y	N	N	N	N	Y	Y	N
Muscular weakness	Y	Y	Y	Y	N	Y	Y	Y	N	N	N	Y
Myalgia	N	Y	N	N	N	Y	Y	Y	N	NA	N	Y
Arthralgia	Y	N	N	N	Y	N	N	Y	Y	NA	N	N
CK (IU/L)	650	1282	N	361	N	N	N	314	592	NA	N	251
Dysphagia	Y	Y	N	Y	N	Y	N	Y	N	NA	Y	Y
PAH	N	Y	NA	NA	N	N	NA	Y	N	NA	N	Y
ILD	N	Y	Y	Y	N	N	Y	Y	Y	NA	N	Y
Cancer	Y	N	N	N	N	N	N	Y	N	NA	N	N
MSAs	TIF1	N	PL-7	N	N	N	Jo-1	N	Jo-1	N	N	N
ESR (mm/h)	36	4	28	45	7	62	6	NA	60	NA	21	62
CRP (mg/dl)	7.39	1.01	3.36	0.17	0.22	NA	0.19	0.59	1.95	NA	0.15	2.4
Presentation	S	S	S	S/M	S	NA	NA	S/M	S/M	NA	S	S

Clinical features of dermatomyositis patients with anti-SAE antibodies. Specific binding of serum antibodies to recombinant SAE1 (OriGene [TP301820]) was analyzed using ELISA. Figure cited from Sci Rep, PMID: 28298642



Coomassie blue staining of purified SAE1 protein (Cat# [TP301820]). The protein was produced from HEK293T cells transfected with SAE1 cDNA clone (Cat# [RC201820]) using MegaTran 2.0 (Cat# [TT210002]).