

Product datasheet for **PH322965**

Proteasome Activator Subunit 4 (PSME4) (NM_014614) Human Mass Spec Standard

Product data:

Product Type:	Mass Spec Standards
Description:	PSME4 MS Standard C13 and N15-labeled recombinant protein (NP_055429)
Species:	Human
Expression Host:	HEK293
Expression cDNA Clone or AA Sequence:	RC222965
Predicted MW:	211.2 kDa



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Protein Sequence: >RC222965 representing NM_014614
 Red=Cloning site Green=Tags(s)

MEPAERAGVGPEPEPGRPEPGRPFVQKEIVYNKLLPYAERLDAESDLQLAQIKCNLGRAVQLQELWP
 GGLFWTRKLSYIRLYGRKFSKEDHVLFIKLLYELVSIPKLEISMMOGFARLLINLLKKKELLSRADLEL
 PWRPLYDMVERILYSKTEHLGLNWFNPNSVENILKTLVKSCRPFYPADATAEMLEEWRLMCPFDVMTQKA
 IITYFEIFLPTSLPPELHHKGFKLWFDLIGLWVSVQNLQWEGQLVNLFARLATDNIGYIDWDPYVPKIF
 TRILRSLNLPVGSQVLVPRFLTNAVYDIGHAVIWIITAMMGPSKLVQKHLAGLFNSITSFYHPSNNGRWL
 NKLMKLLQRLPNSVVRRLHRERYKPSWLTVPDPSHKLTDQDVTDFVQCIIQPVLLAMFSKTSLEAAQA
 LQNLALMRPELVIPPVLERTYPALETLEPHQLTATLSCVIGVARSLVSGGRWFPEGPTHMLPLLMRALP
 GVDPNDFSKCMITFQFIATFSTLVPLVDCSSVLQERNL TEVERELCSATAEFEDFVLQFMDRFCGLIES
 STLEQTREETETEKMTHLESVELGLSSTFSTILTQCSKEIFMVALQKVFNFSTSHIFETRVAGRMVADM
 CRAAVKCCPEESKLVFPHCCSVITQLTMNDDVLNDEELDKELLWNLQLLSEITRVDRKLLLYREQLVK
 ILQRTLHLTCKQGYTLSCNLLHLLRSTTLIYPTHEYCSVPGGFDKPPSEYFPIKDWGKPGDLWNLGIQWH
 VPSSEEVSAFYLLDSFLQPELVKLQHCGDGKLEMSRDDILQSLTIVHNCLIGSGNLLPPLKGEVPTNLV
 PSMVSL EETKLYTGLELDLSRENHREVIATVIRKLLNHILDNSED DTKSLFLI I K I I G D L L Q F Q G S H K H E
 FDSRWKSFNLVKKSMENRLHGKKQHIRALLIDRVMLQHELRTLVEGCEYKKIHQMIRDLLRLSTSSYS
 QVRNKAQQTFFAALGAYNFCRDIIPLVLEFLRPDRQGVTTQQQFKGALYCLLGNHSGVCLANLHDWDCIV
 QTWPAIVSSGLSQAMSLEKPSIVRLFDDLAEKIHRQYETIGLDFITPKSCVEIAELLQQSKNPSINQILL
 SPEIKIEGIKRQEQKNADALRNYENLVDTL DGV EQ R N L P W K F E H I G I G L L S L L L R D D R V L P L R A I R F F V
 ENLNHDAIVVRKMAISAVAGILKQLKRTHKKTINPCEISGCPKPTQIIAGDRPDNHWLHYDSKTIPTK
 KEWESSCFVEKTHWGYTWPKNM V V Y A G V E E Q P K L G R S R E D M T E A E Q I I F D H F S D P K F V E Q L I T F L S L E D
 RKGKDKFNPRRFLFKGIFRNFDDAFLPVLKPHLEHLVADSHSTQRCVAEIIAGLIRGSKHWTFEKVEK
 LWELLCPLLRTALSNIITVETYNDWGACIATSCESRDPRKLHWLFELLESPLSGEGGSFVDACRLYYLQG
 GLAQQEWVPELLHRLLYLEPKLTQVYKNVRERIGSVLTYIFMIDVSLPNTTPTISPHVPEFTARILEK
 LKPLMDVDEEIQNHVMEENGIGEEDERTQGIKLLKTIKWL MASAGRSFSTAVTEQLQLLPLFFKIAPVE
 NDNSYDELKRDAKLCLSMSQGLLYPHQVPLVQLKQTARSSSWHARYTVLTYLQTMVFNLFIFLNNE
 DAVKDIRWLVISLLEDEQLEVREMAATLSGLLQCNFLTMDSPMQIHFEQLCKTKLPKRRKRDPSVGD
 IPSAELVKRHAGVGLGACVLSPPYDVPTWMPQLLMNLSAHLNDPQPIEMTVKKTLSNFRRTHHDNWQEH
 KQFTDDQLLVLDLLVSPCYA

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Tag: C-Myc/DDK

Purity: > 80% as determined by SDS-PAGE and Coomassie blue staining

Concentration: >0.05 µg/µL as determined by microplate BCA method

Labeling Method: Labeled with [U- 13C6, 15N4]-L-Arginine and [U- 13C6, 15N2]-L-Lysine

Buffer: 25 mM Tris-HCl, 100 mM glycine, pH 7.3

Storage: Store at -80°C. Avoid repeated freeze-thaw cycles.

Stability: Stable for 3 months from receipt of products under proper storage and handling conditions.

RefSeq: [NP_055429](#)

RefSeq Size: 7101

RefSeq ORF: 5529

Synonyms: PA200

Locus ID: 23198

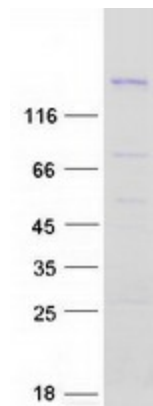
UniProt ID: [Q14997](#)

Cytogenetics: 2p16.2

Summary: Associated component of the proteasome that specifically recognizes acetylated histones and promotes ATP- and ubiquitin-independent degradation of core histones during spermatogenesis and DNA damage response. Recognizes and binds acetylated histones via its bromodomain-like (BRDL) region and activates the proteasome by opening the gated channel for substrate entry. Binds to the core proteasome via its C-terminus, which occupies the same binding sites as the proteasomal ATPases, opening the closed structure of the proteasome via an active gating mechanism. Component of the spermatoproteasome, a form of the proteasome specifically found in testis: binds to acetylated histones and promotes degradation of histones, thereby participating actively to the exchange of histones during spermatogenesis. Also involved in DNA damage response in somatic cells, by promoting degradation of histones following DNA double-strand breaks.[UniProtKB/Swiss-Prot Function]

Protein Pathways: Proteasome

Product images:



Coomassie blue staining of purified PSME4 protein (Cat# [TP322965]). The protein was produced from HEK293T cells transfected with PSME4 cDNA clone (Cat# [RC222965]) using MegaTran 2.0 (Cat# [TT210002]).