Human PSME3 / PA28g Protein, His Tag

Catalog # PS3-H5142

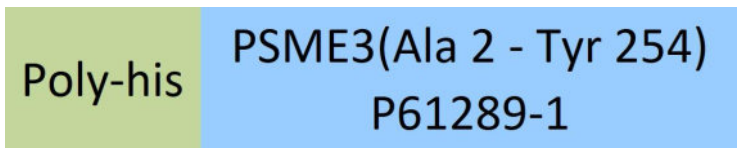
Synonym

PSME3,PA28gamma,REG-gamma

Source

Human PSME3, His Tag (PS3-H5142) is expressed from E.coli cells. It contains AA Ala 2 - Tyr 254 (Accession # P61289-1).
Predicted N-terminus: Met

Molecular Characterization



This protein carries a polyhistidine tag at the N-terminus.

The protein has a calculated MW of 30.3 kDa. The protein migrates as 28-33 kDa under reducing (R) condition (SDS-PAGE).

Endotoxin

Less than 1.0 EU per μg by the LAL method.

Purity

>95% as determined by SDS-PAGE.

Formulation

Lyophilized from 0.22 μm filtered solution in 50 mM Tris, 150 mM NaCl, pH7.5. Normally trehalose is added as protectant before lyophilization.

Contact us for customized product form or formulation.

Reconstitution

Please see Certificate of Analysis for specific instructions.

For best performance, we strongly recommend you to follow the reconstitution protocol provided in the CoA.

Storage

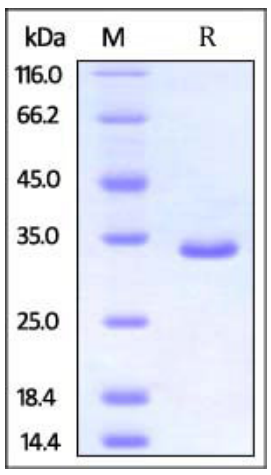
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

SDS-PAGE



Human PSME3, His Tag on SDS-PAGE under reducing (R) condition. The gel was stained overnight with Coomassie Blue. The purity of the protein is greater than 95%.

Background

Proteasome activator complex subunit 3 (PSME3),a member of the PA28 family, is also known as 11S regulator complex subunit gamma (REG-gamma), activator of multicatalytic protease subunit 3 and proteasome activator 28 subunit gamma (PA28gamma). PSME3 activates the trypsin-like catalytic subunit of the proteasome but inhibits the chymotrypsin-like and postglutamyl-preferring (PGPH) subunits. PSME3 can also facilitate the MDM2-p53/TP53 interaction which promotes ubiquitination- and MDM2-dependent proteasomal degradation of p53/TP53, limiting its accumulation and resulting in inhibited apoptosis after DNA damage. Furthermore,PSME3 may also be involved in cell cycle regulation.

References

(1) Miki Y., et al., 1994, Science 266:66-71.

(2) Realini C., et al., 1997,J. Biol. Chem. 272:25483-25492.

(3) Zhang Z., et al., 2008, EMBO J. 27:852-864.

Please contact us via TechSupport@acrobiosystems.com if you have any question on this product.