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PSMA2 Rabbit mAb

Catalog # AP75957

Product Information

Application	WB, IHC-P, IHC-F
Primary Accession	P25787
Reactivity	Rat, Human, Mouse
Host	Rabbit
Clonality	Monoclonal Antibody
Isotype	IgG
Conjugate	Unconjugated
Purification	Affinity Purified
Calculated MW	25899

Additional Information

Gene ID	5683
Other Names	PSMA2
Dilution	WB~~1:1000-1:5000 IHC-P~~N/A IHC-F~~N/A
Format	Liquid in 50mM Tris-Glycine(pH 7.4), 0.15M NaCl, 40%Glycerol, 0.01% sodium azide and 0.05% BSA.
Storage	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.

Protein Information

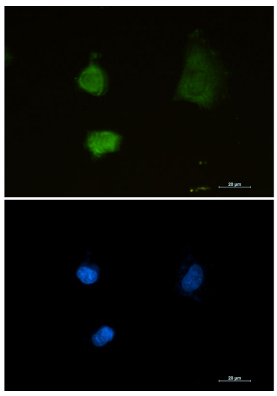
Name	PSMA2 (HGNC:9531)
Synonyms	HC3, PSC3
Function	Component of the 20S core proteasome complex involved in the proteolytic degradation of most intracellular proteins. This complex plays numerous essential roles within the cell by associating with different regulatory particles. Associated with two 19S regulatory particles, forms the 26S proteasome and thus participates in the ATP- dependent degradation of ubiquitinated proteins. The 26S proteasome plays a key role in the maintenance of protein homeostasis by removing misfolded or damaged proteins that could impair cellular functions, and by removing proteins whose functions are no longer required. Associated with the PA200 or PA28, the 20S proteasome mediates ubiquitin- independent protein degradation. This type of proteolysis is required in several pathways including spermatogenesis (20S-PA200 complex) or generation of a subset of MHC class I-presented antigenic peptides (20S-PA28 complex).

Cellular Location	Cytoplasm. Nucleus. Note=Translocated from the cytoplasm into the nucleus following interaction with AKIRIN2, which bridges the proteasome with the nuclear import receptor IPO9 (PubMed:34711951) Colocalizes with TRIM5 in cytoplasmic bodies (By similarity) {ECO:0000250|UniProtKB:P49722, ECO:0000269|PubMed:34711951}

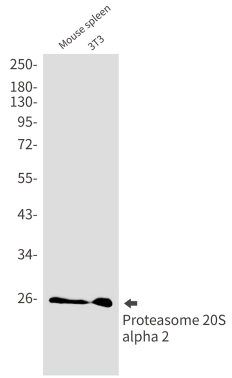
Background

The proteasome is a multicatalytic proteinase complex which is characterized by its ability to cleave peptides with Arg, Phe, Tyr, Leu, and Glu adjacent to the leaving group at neutral or slightly basic pH.

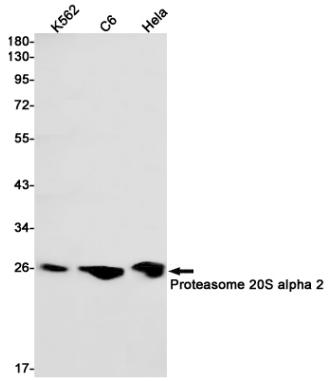
Images



Immunocytochemistry analysis of Proteasome alpha 2 (green) in U87-MG using Proteasome alpha 2 antibody,and DAPI(blue).

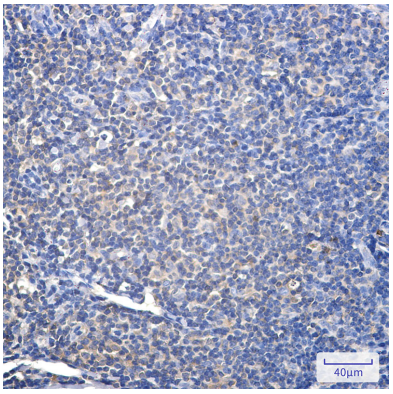


Western blot analysis of Proteasome 20S alpha 2 in mouse spleen, 3T3 lysates using Proteasome 20S alpha 2 antibody.



Western blot analysis of Proteasome 20S alpha 2 in K562, C6, Hela lysates using Proteasome 20S alpha 2 antibody

Immunohistochemistry analysis of paraffin-embedded Human tonsil using Proteasome 20S alpha 2 antibody.High-pressure and temperature Sodium Citrate pH 6.0 was used for antigen retrieval.



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