



Rabbit Anti-LMP2 antibody

SL2787R

Product Name:	LMP2
Chinese Name:	低分子量蛋白2抗体
Alias:	Proteasome 20S LMP2; Large multifunctional peptidase 2; LMP 2; LMP2; Low molecular mass protein 2; Macropain chain 7; MGC70470; Multicatalytic endopeptidase complex chain 7; Proteasome beta 9 subunit; Proteasome catalytic subunit 1i; Proteasome chain 7; Proteasome related gene 2; Proteasome subunit beta 6i; Proteasome subunit beta type 9; PSMB 9; PSMB9; PSB9_HUMAN.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,Dog,Pig,Cow,Horse,Rabbit,
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	23kDa
Cellular localization:	The nucleuscytoplasmic
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human Proteasome 20S LMP2:101-219/219
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	PubMed
Product Detail:	The proteasome is a multicatalytic proteinase complex with a highly ordered ring-shaped 20S core structure. The core structure is composed of 4 rings of 28 non-identical

subunits; 2 rings are composed of 7 alpha subunits and 2 rings are composed of 7 beta subunits. Proteasomes are distributed throughout eukaryotic cells at a high concentration and cleave peptides in an ATP/ubiquitin-dependent process in a non-lysosomal pathway. An essential function of a modified proteasome, the immunoproteasome, is the processing of class I MHC peptides. This gene encodes a member of the proteasome B-type family, also known as the T1B family, that is a 20S core beta subunit. This gene is located in the class II region of the MHC (major histocompatibility complex). Expression of this gene is induced by gamma interferon and this gene product replaces catalytic subunit 1 (proteasome beta 6 subunit) in the immunoproteasome. Proteolytic processing is required to generate a mature subunit. [provided by RefSeq, Mar 2010]

Function:

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. The proteasome has an ATP-dependent proteolytic activity. This subunit is involved in antigen processing to generate class I binding peptides. Replacement of PSMB6 by PSMB9 increases the capacity of the immunoproteasome to cleave model peptides after hydrophobic and basic residues.

Subunit:

The 26S proteasome consists of a 20S proteasome core and two 19S regulatory subunits. The 20S proteasome core is composed of 28 subunits that are arranged in four stacked rings, resulting in a barrel-shaped structure. The two end rings are each formed by seven alpha subunits, and the two central rings are each formed by seven beta subunits. The catalytic chamber with the active sites is on the inside of the barrel. This subunit is part of the immunoproteasome where it displaces the equivalent housekeeping subunit PSMB6. Interacts with HIV-1 TAT protein.

Subcellular Location:

Cytoplasm. Nucleus.

Tissue Specificity:

Highly expressed in immature dendritic cells (at protein level).

Post-translational modifications:

Autocleaved. The resulting N-terminal Thr residue of the mature subunit is responsible for the nucleophile proteolytic activity.

Similarity:

Belongs to the peptidase T1B family.

SWISS:

P28065

Gene ID:

5698

Database links:

[Entrez Gene: 510593](#)Cow

[Entrez Gene: 474867](#)Dog

[Entrez Gene: 5698](#)Human

[Entrez Gene: 16912](#)Mouse

[Entrez Gene: 24967](#)Rat

[Omim: 177045](#)Human

[SwissProt: Q3SZC2](#)Cow

[SwissProt: P28065](#)Human

[SwissProt: P28076](#)Mouse

[SwissProt: P28077](#)Rat

[Unigene: 654585](#)Human

[Unigene: 390983](#)Mouse

[Unigene: 13686](#)Rat

Important Note:

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.