ARG55778
anti-Proteasome 20S LMP2 antibody

Package: 100 µl, 50 µl
Store at: -20°C

Summary

Product Description	Rabbit Polyclonal antibody recognizes Proteasome 20S LMP2
Tested Reactivity	Hu, Ms
Tested Application	FACS, ICC/IF, IHC-P, WB
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Target Name	Proteasome 20S LMP2
Species	Human
Immunogen	KLH-conjugated synthetic peptide corresponding to aa. 205-239 (C-terminus) of Human Proteasome 20S LMP2.
Conjugation	Un-conjugated
Alternate Names	beta1i; Proteasome subunit beta type-9; Really interesting new gene 12 protein; Proteasome chain 7; Multicatalytic endopeptidase complex chain 7; Proteasome subunit beta-1i; Macropain chain 7; RING12; EC 3.4.25.1; LMP2; PSMB6i; Low molecular mass protein 2

Application Instructions

Application table

Application	Dilution
FACS	1:25
ICC/IF	
IHC-P	1:25
WB	1:2000

Application Note: * The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.

Properties

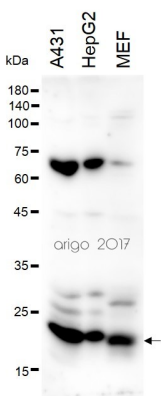
Form	Liquid
Purification	Purification with Protein A and immunogen peptide.
Buffer	PBS and 0.09% (W/V) Sodium azide.
Preservative	0.09% (W/V) Sodium azide.
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C or below. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.

Note	For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

Database links	GeneID: 16912 Mouse GeneID: 5698 Human Swiss-port # P28065 Human Swiss-port # P28076 Mouse
Gene Symbol	PSMB9
Gene Full Name	proteasome (prosome, macropain) subunit, beta type, 9
Background	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. [UniProt]
Calculated Mw	23 kDa
PTM	Autocleaved. The resulting N-terminal Thr residue of the mature subunit is responsible for the nucleophile proteolytic activity.
Cellular Localization	Cytoplasm. Nucleus

Images



ARG55778 anti-Proteasome 20S LMP2 antibody WB image

Western blot: 30 µg of A431, HepG2 and MEF cell lysates stained with ARG55778 anti-Proteasome 20S LMP2 antibody at 1:1000 dilution.