

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human LMP2/PSMB9 in direct ELISAs and Western blots. In direct ELISAs, approximately 50% cross-reactivity with recombinant human PSMB6 is observed.
Source	Monoclonal Mouse IgG _{2B} Clone # 792520
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	<i>E. coli</i> -derived recombinant human LMP2/PSMB9 Thr21-Glu219 Accession # P28065
Conjugate	Alexa Fluor 405 Excitation Wavelength: 405 nm Emission Wavelength: 421 nm
Formulation	Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide *Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. *General Protocols* are available in the *Technical Information* section on our website.

Western Blot	Optimal dilution of this antibody should be experimentally determined.
Immunocytochemistry	Optimal dilution of this antibody should be experimentally determined.

PREPARATION AND STORAGE

Shipping	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied

BACKGROUND

LMP2 (large multifunctional peptidase 2), also called PSMB9 (proteasome subunit beta 9) or PSMB6i, is a 22 kDa broad-specificity aminopeptidase of the T1B family that is a component of the 20S immunoproteasome core (α7b7b7a7) of the 26S proteasome particle. Induction of LMP2 by IFN-γ, IRF-1, TNF-α, CD40L, or heat shock in immune-responsive cells or cancer cells promotes replacement of proteasome subunit PSMB6 by LMP2 and processing of peptides for presentation by MHC I. After auto-cleavage between amino acids (aa) 20-21, human LMP2 (aa 21-219) shares 91% aa sequence identity with mouse and rat LMP2. Alternate splicing creates a short form, LMP2.S, which lacks aa 4-13 within the propeptide.

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