

## DESCRIPTION

<b>Species Reactivity</b>	Human
<b>Specificity</b>	Detects human LMP2/PSMB9 in direct ELISAs and Western blots. In direct ELISAs, approximately 50% cross-reactivity with recombinant human PSMB6 is observed.
<b>Source</b>	Monoclonal Mouse IgG <sub>2B</sub> Clone # 792520
<b>Purification</b>	Protein A or G purified from hybridoma culture supernatant
<b>Immunogen</b>	<i>E. coli</i> -derived recombinant human LMP2/PSMB9 Thr21-Glu219 Accession # P28065
<b>Conjugate</b>	Alexa Fluor 594 Excitation Wavelength: 590 nm Emission Wavelength: 617 nm
<b>Formulation</b>	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.

<b>Western Blot</b>	Optimal dilution of this antibody should be experimentally determined.
<b>Immunocytochemistry</b>	Optimal dilution of this antibody should be experimentally determined.

## PREPARATION AND STORAGE

<b>Shipping</b>	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.
<b>Stability &amp; Storage</b>	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.

## PRODUCT SPECIFIC NOTICES

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