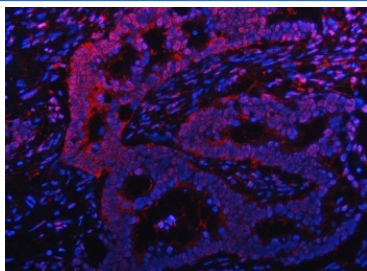


Proteasome subunit beta type 9 Antibody / PSMB9 (RQ8149)

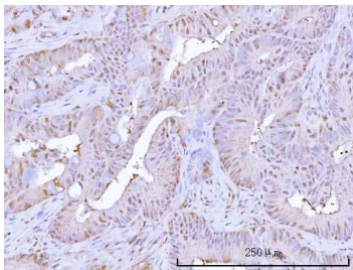
Catalog No.	Formulation	Size
RQ8149	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

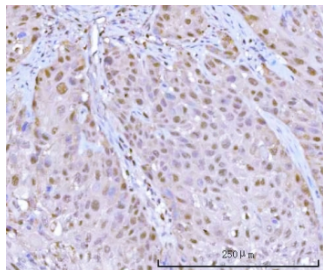
Availability	1-3 business days
Species Reactivity	Human, Mouse, Rat
Format	Antigen affinity purified
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Antigen affinity purified
Buffer	Lyophilized from 1X PBS with 2% Trehalose
UniProt	P28065
Localization	Cytoplasmic, nuclear
Applications	Western Blot : 0.5-1ug/ml Immunohistochemistry (FFPE) : 2-5ug/ml Immunofluorescence : 5ug/ml Flow Cytometry : 1-3ug/million cells Direct ELISA : 0.1-0.5ug/ml
Limitations	This Proteasome subunit beta type 9 antibody is available for research use only.



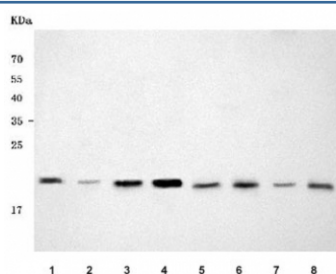
Immunofluorescent staining of FFPE human intestinal cancer tissue with Proteasome subunit beta type 9 antibody (red) and DAPI nuclear stain (blue). HIER: steam section in pH8 EDTA buffer for 20 min.



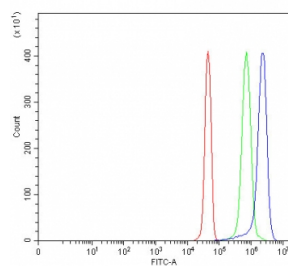
IHC staining of FFPE human rectum adenocarcinoma tissue with Proteasome subunit beta type 9 antibody. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



IHC staining of FFPE human urothelial carcinoma tissue with Proteasome subunit beta type 9 antibody. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



Western blot testing of 1) human Raji, 2) human HepG2, 3) human Jurkat, 4) human ThP-1, 5) rat spleen, 6) rat thymus, 7) mouse spleen and 8) mouse thymus tissue lysate with Proteasome subunit beta type 9 antibody. Predicted molecular weight ~23 kDa.



Flow cytometry testing of fixed and permeabilized human JK cells with Proteasome subunit beta type 9 antibody at 1ug/million cells (blocked with goat sera); Red=cells alone, Green=isotype control, Blue= Proteasome subunit beta type 9 antibody.

Description

Proteasome subunit beta type-9 as known as 20S proteasome subunit beta-1i is a protein that in humans is encoded by the PSMB9 gene. 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.

Application Notes

Optimal dilution of the Proteasome subunit beta type 9 antibody should be determined by the researcher.

Immunogen

E. coli-derived recombinant human protein (amino acids M1-E219) was used as the immunogen for the Proteasome subunit beta type 9 antibody.

Storage

After reconstitution, the Proteasome subunit beta type 9 antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.