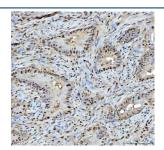


# PSMA1 Antibody / Proteasome 20S alpha 1 (R32555)

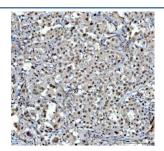
Catalog No.	Formulation	Size
R32555	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

# **Bulk quote request**

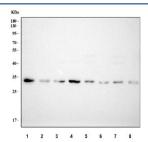
Availability	1-3 business days
Species Reactivity	Human, Mouse, Rat
Format	Antigen affinity purified
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Antigen affinity
Buffer	Lyophilized from 1X PBS with 2% Trehalose
UniProt	P25786
Localization	Cytoplasmic, nuclear
Applications	Western Blot : 0.5-1ug/ml Immunohistochemistry (FFPE) : 2-5ug/ml
Limitations	This PSMA1 antibody is available for research use only.



IHC staining of FFPE human rectum adenocarcinoma tissue with PSMA1 antibody. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



IHC staining of FFPE human lung cancer tissue with PSMA1 antibody. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



Western blot testing of 1) human MCF7, 2) human PC-3, 3) human HepG2, 4) human Jurkat, 5) rat brain, 6) rat liver, 7) mouse brain and 8) mouse liver tissue lysate with PSMA1 antibody. Predicted molecular weight ~30 kDa.

## **Description**

Proteasome subunit alpha type-1 is a protein that in humans is encoded by the PSMA1 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 peptidase T1A family, that is a 20S core alpha subunit. Alternative splicing results in multiple transcript variants encoding distinct isoforms.

### **Application Notes**

Differences in protocols and secondary/substrate sensitivity may require the PSMA1 antibody to be titrated for optimal performance.

#### **Immunogen**

Amino acids 159-204 (MSIGARSQSARTYLERHMSEFMECNLNELVKHGLRALRETLPAEQD) from the human protein were used as the immunogen for the PSMA1 antibody.

#### **Storage**

After reconstitution, the PSMA1 antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.