

**Goat Anti-PI31 / PSMF1 (Isoform 1) Antibody**  
**Peptide-affinity purified goat antibody**  
**Catalog # AF1824a****Specification**

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**Goat Anti-PI31 / PSMF1 (Isoform 1) Antibody - Product Information**

Application	WB
Primary Accession	<a href="#">Q92530</a>
Other Accession	<a href="#">NP_006805</a> , <a href="#">9491</a> , <a href="#">228769 (mouse)</a>
Reactivity	Human
Predicted	Mouse, Rat, Dog, Cow
Host	Goat
Clonality	Polyclonal
Concentration	100ug/200ul
Isotype	IgG
Calculated MW	29817

**Goat Anti-PI31 / PSMF1 (Isoform 1) Antibody - Additional Information****Gene ID** 9491**Other Names**

Proteasome inhibitor PI31 subunit, hPI31, PSMF1

**Format**

0.5 mg IgG/ml in Tris saline (20mM Tris pH7.3, 150mM NaCl), 0.02% sodium azide, with 0.5% bovine serum albumin

**Storage**

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions**

Goat Anti-PI31 / PSMF1 (Isoform 1) Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

**Goat Anti-PI31 / PSMF1 (Isoform 1) Antibody - Protein Information****Name** PSMF1**Function**

Plays an important role in control of proteasome function. Inhibits the hydrolysis of protein and peptide substrates by the 20S proteasome. Also inhibits the activation of the proteasome by the proteasome regulatory proteins PA700 and PA28.

**Cellular Location**

Cytoplasm. Endoplasmic reticulum

## Goat Anti-PI31 / PSMF1 (Isoform 1) Antibody - Protocols

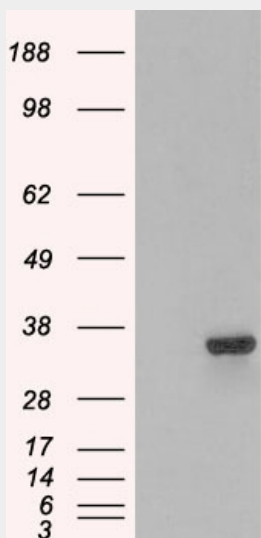
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

## Goat Anti-PI31 / PSMF1 (Isoform 1) Antibody - Images



AF1824a staining (1 µg/ml) of Human Kidney lysate (RIPA buffer, 30 µg total protein per lane). Primary incubated for 1 hour. Detected by western blot using chemiluminescence.



HEK293 overexpressing PSMF1 (RC218938) and probed with AF1824a (mock transfection in first lane), tested by Origene.

**Goat Anti-PI31 / PSMF1 (Isoform 1) Antibody - Background**

The 26S proteasome is a multicatalytic proteinase complex with a highly ordered structure composed of 2 complexes, a 20S core and a 19S regulator. The 20S core 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. The 19S regulator is composed of a base, which contains 6 ATPase subunits and 2 non-ATPase subunits, and a lid, which contains up to 10 non-ATPase 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 protein that inhibits the activation of the proteasome by the 11S and 19S regulators. Alternative transcript variants have been identified for this gene.

**Goat Anti-PI31 / PSMF1 (Isoform 1) Antibody - References**

Structure of a conserved dimerization domain within the F-box protein Fbxo7 and the PI31 proteasome inhibitor. Kirk R, et al. J Biol Chem, 2008 Aug 8. PMID 18495667.  
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