

# S5a/PSMD4 (D20B2) Rabbit mAb



✓ 100 µl  
(10 western blots)

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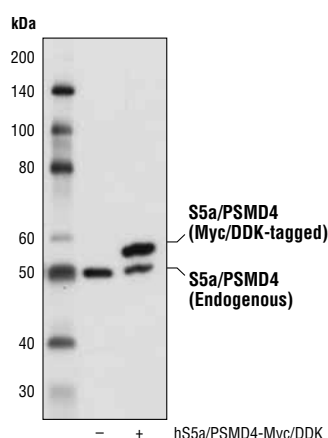
Entrez-Gene ID #5710  
Swiss-Prot Acc. #P55036

Applications W, IP Endogenous	Species Cross-Reactivity* H, M, R, Mk, (Hm, X, Z, B, Dg, Pg, Hr)	Molecular Wt. 50 kDa	Isotype Rabbit IgG**
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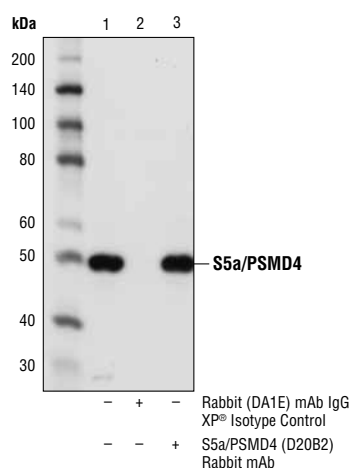
**Background:** S5a (PSMD4) is a subunit of the 19S regulatory proteasome complex functioning in ubiquitinated-protein targeting and degradation (1). S5a contains two polyubiquitin binding motifs (UIM) that bind multiubiquitin chains by hydrophobic interaction (2,3). In addition to ubiquitin, the UIM of S5a shows high affinity to a ubiquitin-like domain present in many proteins. S5a binds to these types of proteins directly and mediates their targeting to the proteasome for degradation (4,5).

**Specificity/Sensitivity:** S5a/PSMD4 (D20B2) Rabbit mAb recognizes endogenous levels of total S5a/PSMD4 protein.

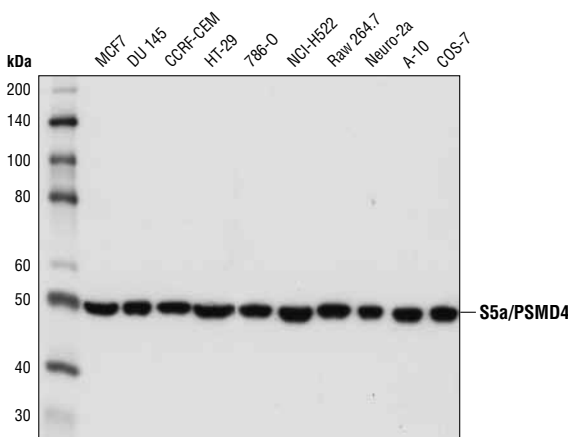
**Source/Purification:** Monoclonal antibody is produced by immunizing animals with a synthetic peptide corresponding to residues near the carboxy terminus of human S5a/PSMD4 protein.



Western blot analysis of extracts from 293T cells, mock transfected (-) or transfected with a construct expressing Myc/DDK-tagged full-length human S5a/PSMD4 (hS5a/PSMD4-Myc/DDK; +), using S5a/PSMD4 (D20B2) Rabbit mAb.



Immunoprecipitation of S5a/PSMD4 from 293T cell extracts, using Rabbit (DA1E) mAb IgG XP® Isotype Control #3900 (lane 2) or S5a/PSMD4 (D20B2) Rabbit mAb (lane 3). Lane 1 is 10% input. Western blot analysis was performed using S5a/PSMD4 (D20B2) Rabbit mAb.



Western blot analysis of extracts from various cell lines using S5a/PSMD4 (D20B2) Rabbit mAb.

**Storage:** Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA, 50% glycerol and less than 0.02% sodium azide. Store at -20°C. Do not aliquot the antibody.

\*Species cross-reactivity is determined by western blot.

\*\*Anti-rabbit secondary antibodies must be used to detect this antibody.

## Recommended Antibody Dilutions:

Western blotting 1:1000  
Immunoprecipitation 1:50

For product specific protocols please see the web page for this product at [www.cellsignal.com](http://www.cellsignal.com).

Please visit [www.cellsignal.com](http://www.cellsignal.com) for a complete listing of recommended complementary products.

## Background References:

- (1) Deveraux, Q. et al. (1995) *J. Biol. Chem.* 270, 23726-23729.
- (2) Young, P. et al. (1998) *J. Biol. Chem.* 273, 5461-5467.
- (3) Beal, R. et al. (1996) *Proc. Natl. Acad. Sci. USA* 93, 861-866.
- (4) Fujiwara, K. et al. (2004) *J. Biol. Chem.* 279, 4760-4767.
- (5) Sakata, E. et al. (2003) *EMBO Rep.* 4, 301-306.

**IMPORTANT:** For western blots, incubate membrane with diluted antibody in 5% w/v nonfat dry milk, 1X TBS, 0.1% Tween-20 at 4°C with gentle shaking, overnight.

**Applications Key:** W—Western IP—Immunoprecipitation IHC—Immunohistochemistry ChIP—Chromatin Immunoprecipitation IF—Immunofluorescence F—Flow cytometry E-P—ELISA-Peptide  
**Species Cross-Reactivity Key:** H—human M—mouse R—rat Hm—hamster Mk—monkey Mi—mink C—chicken Dm—D. melanogaster X—Xenopus Z—zebrafish B—bovine  
Dg—dog Pg—pig Sc—S. cerevisiae Ce—C. elegans Hr—horse All—all species expected Species enclosed in parentheses are predicted to react based on 100% homology.