

Mouse anti-Human, Rat CAPNS1 Monoclonal Antibody | anti-CAPNS1 antibody

CAPNS1 (Calpain Small Subunit 1, CSS1, Calcium-activated Neutral Proteinase Small Subunit, CANP Small Subunit, Calcium-dependent Protease Small Subunit, CDPS, Calcium-dependent Protease Small Subunit 1, Calpain Regulatory Subunit, CAPN4, CAPNS) (HRP)

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA25339	Mouse	Human, Rat	ELISA, Immunohistochemistry, Western Blot

PRODUCT SYNONYMS

CAPNS1; Monoclonal Antibody; CAPNS1 (Calpain Small Subunit 1; CSS1; Calcium-activated Neutral Proteinase Small Subunit; CANP Small Subunit; Calcium-dependent Protease Small Subunit; CDPS; Calcium-dependent Protease Small Subunit 1; Calpain Regulatory Subunit; CAPN4; CAPNS) (HRP); anti-CAPNS1 antibody

PRODUCT SPECIFICATIONS

Host	Mouse
Reactivity	Human, Rat
Clonality	Monoclonal
Isotype	IgG1,k
Clone Number	3C4
Specificity	Recognizes human CAPNS1. Species Crossreactivity: rat.
Purity/Purification	Purified by Protein A Affinity Chromatography.
Form/Format	Supplied as a liquid in PBS, pH 7.2. No preservative added. Labeled with horseradish peroxidase (HRP).
Applicable Applications for anti-CAPNS1 antibody	ELISA, IHC (Immunohistochemistry), WB (Western Blot)
Application Notes	IHC-P: 3ug/ml Applications are based on unconjugated antibody.
Immunogen	Partial recombinant corresponding to aa172-260 from human CAPNS1 (AAH00592) with GST tag. MW of the GST tag alone is 26kD.
Immunogen Sequence	KRWQAIYKQFDTRSGTICSELPGAFAEAGFHLNEHLYNMIIRRYSDSGNMDFDNFISCLVRLDAMFRAFKSLDKDGTGQIQVNIQE
Conjugate	HRP
Preparation and Storage	Store product at 4 degree C if to be used immediately within two weeks. For long-term storage, aliquot to avoid repeated freezing and thawing and store at -20 degree C. Aliquots are stable at -20 degree C for 12 months after receipt. Dilute required amount only prior to immediate use. Further dilutions can be made in assay buffer. Note: Sodium azide is a potent inhibitor of peroxidase and should not be added to HRP conjugates. For maximum recovery of product, centrifuge the original vial after thawing and prior to removing the cap.

IMAGES



WB (Western Blot)
CAPNS1 monoclonal antibody, Western Blot analysis of CAPNS1 expression in A-431.



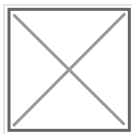
WB (Western Blot)
Western blot analysis of CAPNS1 over-expressed 293 cell line, cotransfected with CAPNS1 Validated Chimera RNAi (Lane 2) or non-transfected control (Lane 1). Blot probed with CAPNS1 monoclonal antibody. GAPDH (36.1kD) used as specificity and loading control.



Application Data
Detection limit for recombinant GST tagged CAPNS1 is ~0.1ng/ml when antibody 124328 was used as capture antibody.



IF (Immunofluorescence)
Immunofluorescence staining of CAPNS1 on HeLa cells using antibody 124328 at 20ug/ml.



IHC (Immunohistochemistry)
Immunoperoxidase staining of CAPNS1 on formalin-fixed paraffin-embedded human kidney using antibody 124328 at 3ug/ml.



WB (Western Blot)
Western Blot analysis of CAPNS1 expression in transfected 293T cell line using antibody 124328: Lane 1: CAPNS1 transfected lysate (28.3kD) Lane 2: Non-transfected lysate

ADDITIONAL INFORMATION

Product Categories/Family for anti-CAPNS1 antibody	Antibodies; Calpain
References	1. Overexpression of a Minimal Domain of Calpastatin Suppresses IL-6 Production and Th17 Development via Reduced NF-kB and Increased STAT5 Signals. Iguchi-Hashimoto M, Usui T, Yoshifuji H, Shimizu M, Kobayashi S, Ito Y, Murakami K, Shiomi A, Yukawa N, Kawabata D, Nojima T, Ohmura K, Fujii T, Mimori T.PLoS One. 2011;6(10):e27020. Epub 2011 Oct 27. 2. The calpain inhibitor calpeptin prevents bleomycin-induced pulmonary fibrosis in mice. Tabata C, Tabata R, Nakano T.Clin Exp Immunol. 2010 Sep 15. doi: 10.1111/j.1365-2249.2010.04257.x. 3. Vitamin E and C supplementation does not ameliorate muscle dysfunction following anterior cruciate ligament surgery. Barker T, Leonard SW, Hansen J, Trawick RH, Ingram R, Burdett G, Lebold KM, Walker JA, Traber MG.Free Radic Biol Med. 2009 Sep 11.

NCBI AND UNIPROT INFORMATION

NCBI GI #	33875613
NCBI GeneID	826
Molecular Weight	28,316 Da
NCBI Official Full Name	Homo sapiens calpain, small subunit 1, mRNA
NCBI Official Synonym Full Names	calpain small subunit 1
NCBI Official Symbol	CAPNS1
NCBI Official Synonym Symbols	CANP; CDPS; CSS1; CANPS; CAPN4; CALPAIN4
NCBI Protein Information	calpain small subunit 1

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.