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Anti-Complement C1S Antibody

Catalog # AP53288

Product Information

Application	WB, IHC, IF/IC
Primary Accession	P09871
Reactivity	Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Calculated MW	76684

Additional Information

Gene ID	716
Other Names	Complement C1s subcomponent; C1 esterase; Complement component 1 subcomponent s
Target/Specificity	KLH-conjugated synthetic peptide encompassing a sequence within the C-term region of human Complement C1S. The exact sequence is proprietary.
Dilution	WB~~ 1:1000 IHC~~1:100~500 IF/IC~~N/A
Format	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.
Storage	Store at -20 °C.Stable for 12 months from date of receipt

Protein Information

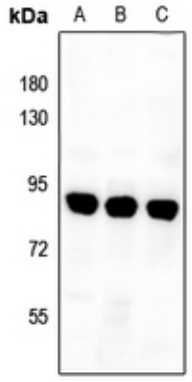
Name	C1S {ECO:0000303|PubMed:3500856, ECO:0000312|HGNC:HGNC:1247}
Function	Component of the complement C1 complex, a multiprotein complex that initiates the classical pathway of the complement system, a cascade of proteins that leads to phagocytosis and breakdown of pathogens and signaling that strengthens the adaptive immune system (PubMed:11445589, PubMed:16169853, PubMed:417728, PubMed:467643, PubMed:6271784, PubMed:6282646, PubMed:6319179, PubMed:70787, PubMed:9422791). C1S is activated following association of the C1 complex with immunoglobulins (IgG or IgM) complexed with antigens to form antigen-antibody complexes on the surface of pathogens (PubMed:34155115). C1S is cleaved and activated by C1R to generate C1s subcomponent heavy and light chains (PubMed:11445589, PubMed:6271784). C1s subcomponent light chain then cleaves and activates C2 and C4, the next components of the classical complement pathway (PubMed:16169853, PubMed:467643, PubMed:6282646, PubMed:6319179, PubMed:6906228, PubMed:70787, PubMed:9422791).

Cellular Location	Secreted. Cell surface. Note=Recruited to the surface of pathogens by the C1Q subcomplex.

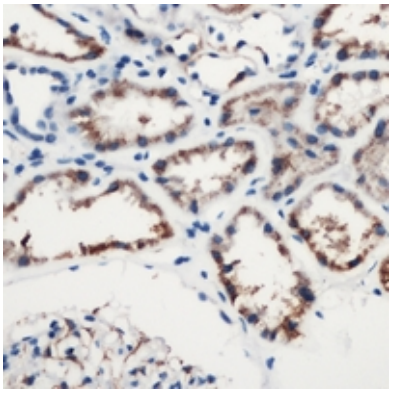
References

McKinnon C.M.,et al.Eur. J. Biochem. 169:547-553(1987).
Tosi M.,et al.Biochemistry 26:8516-8524(1987).
Kusumoto H.,et al.Proc. Natl. Acad. Sci. U.S.A. 85:7307-7311(1988).
Mural R.J.,et al.Submitted (SEP-2005) to the EMBL/GenBank/DDBJ databases.
Endo Y.,et al.J. Immunol. 161:4924-4930(1998).

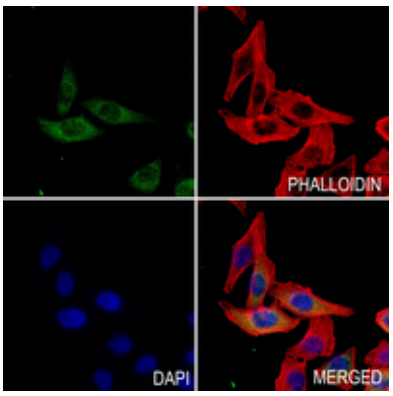
Images



Western blot analysis of Complement C1S expression in CT26 (A), PC3 (B), Hela (C) whole cell lysates. (Predicted band size: 76 kD; Observed band size: 88 kD)



Immunohistochemical analysis of Complement C1S staining in human kidney formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.



Immunofluorescent analysis of Complement C1S staining in MCF7 cells. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 °C in a hidified chamber. Cells were washed with PBST and incubated with a AF488-conjugated secondary antibody (green) in PBS at room temperature in the dark. Phalloidin - AF594 was used to stain Actin filaments (red). DAPI was used to stain the cell nuclei (blue).

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