

C1R Antibody

Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP51025

Product Information

Application	WB
Primary Accession	P00736
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	80119

Additional Information

Gene ID	715
Other Names	Complement C1r subcomponent, Complement component 1 subcomponent r, Complement C1r subcomponent heavy chain, Complement C1r subcomponent light chain, C1R
Target/Specificity	KLH conjugated synthetic peptide derived from human Complement C1R LC
Dilution	WB~~ 1:1000
Format	0.01M PBS, pH 7.2, 0.09% (W/V) Sodium azide, Glycerol 50%
Storage	Store at -20 °C.Stable for 12 months from date of receipt

Protein Information

Name	C1R {ECO:0000303 PubMed:3021205, ECO:0000312 HGNC:HGNC:1246}
Function	<p>Serine protease 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:17996945, PubMed:19473974, PubMed:29449492). C1R catalyzes the first enzymatic step in the classical complement pathway: it is activated by the C1Q subcomplex of the C1 complex, which associates with IgG or IgM immunoglobulins complexed with antigens to form antigen-antibody complexes on the surface of pathogens (PubMed:29449492, PubMed:34155115). Immunoglobulin-binding promotes the autocatalytic cleavage and activation of C1R (PubMed:11445589, PubMed:11673533, PubMed:17996945, PubMed:20178990, PubMed:6254570, PubMed:6271784). Activated C1R then cleaves and activates C1S, the second protease of the classical complement pathway (PubMed:11445589, PubMed:11673533, PubMed:6271784). It is unclear if C1R activates C1S within single, strained C1</p>

complexes or between neighboring C1 complexes on surfaces
(PubMed:[28104818](#), PubMed:[29311313](#), PubMed:[29449492](#)).

Cellular Location

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

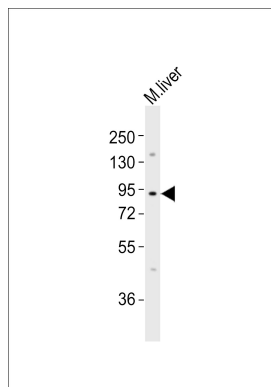
Background

C1r B chain is a serine protease that combines with C1q and C1s to form C1, the first component of the classical pathway of the complement system.

References

Leytus S.P.,et al.Biochemistry 25:4855-4863(1986).
Journet A.,et al.Biochem. J. 240:783-787(1986).
Nakagawa M.,et al.Ann. Hum. Genet. 67:207-215(2003).
Bechtel S.,et al.BMC Genomics 8:399-399(2007).
Scherer S.E.,et al.Nature 440:346-351(2006).

Images



Anti-Complement C1R LC Antibody at 1:1000 dilution + mouse liver lysates Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution Predicted band size : 80 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.