

# Cleaved-C1r LC (I464) Polyclonal Antibody

Catalog # AP63094

### **Product Information**

Application	WB
Primary Accession	<u>P00736</u>
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Calculated MW	80119

#### **Additional Information**

Gene ID	715
Other Names	C1R; Complement C1r subcomponent; Complement component 1 subcomponent r
Dilution	WB~~Western Blot: 1/500 - 1/2000. ELISA: 1/20000. Not yet tested in other applications.
Format	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.
Storage Conditions	-20°C

#### **Protein Information**

Name	C1R {ECO:0000303 PubMed:3021205, ECO:0000312 HGNC:HGNC:1246}
Function	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: <u>17996945</u> , PubMed: <u>19473974</u> , PubMed: <u>29449492</u> ). 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: <u>29449492</u> , PubMed: <u>34155115</u> ). Immunoglobulin-binding promotes the autocatalytic cleavage and activation of C1R (PubMed: <u>11445589</u> , PubMed: <u>11673533</u> , PubMed: <u>17996945</u> , PubMed: <u>20178990</u> , PubMed: <u>6254570</u> , PubMed: <u>6271784</u> ). Activated C1R then cleaves and activates C1S, the second protease of the classical complement pathway (PubMed: <u>11445589</u> , PubMed: <u>11673533</u> , PubMed: <u>6271784</u> ). It is unclear if C1R activates C1S within single, strained C1 complexes or between neighboring C1 complexes on surfaces (PubMed: <u>28104818</u> , PubMed: <u>29311313</u> , PubMed: <u>29449492</u> ).

## 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.

#### Images



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