

Factor D Rabbit pAb

Catalog # AP99647

Product Information

Application	WB, IHC-P, IHC-F, IF
Primary Accession	P00746
Other Accession	P00746
Host	Rabbit
Clonality	Polyclonal
Calculated MW	27033
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human Factor D/Adipsin
Epitope Specificity	21-120/253
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SIMILARITY	Belongs to the peptidase S1 family. Contains 1 peptidase S1 domain.
DISEASE	Defects in CFD are the cause of complement factor D deficiency (CFD deficiency) [MIM:134350]. CFD deficiency predisposes to invasive meningococcal disease.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	Adipsin is the mouse homolog of the previously described human complement Factor D, a serine protease, which is now designated human Adipsin. Human Adipsin is highly expressed in and secreted by adipose tissue, and it has also been found in monocytes and macrophages. Rodent Adipsin has only been detected in high levels in adipose tissue. It has been shown that complement factor B, when complexed with activated complement component C3, is cleaved by Adipsin. While low expression of Adipsin has been confirmed in obese mice with hypothalamic defects, this inverse correlation between Adipsin expression and obesity has not been demonstrated in humans.

Additional Information

Gene ID	1675
Other Names	ADIPSIN; ADN; DF; PFD; CFAD_HUMAN; CFD; C3 convertase activator; Properdin factor D; 3.4.21.46; complement factor D; D component of complement (adipsin); complement factor D (adipsin)
Dilution	WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

Protein Information

Name	CFD (HGNC:2771)
Synonyms	DF, PFD
Function	Serine protease that initiates the alternative 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:21205667, PubMed:22362762, PubMed:6769474, PubMed:874324, PubMed:9748277). In contrast to other complement pathways (classical, lectin and GZMK) that are directly activated by pathogens or antigen-antibody complexes, the alternative complement pathway is initiated by the spontaneous hydrolysis of complement C3 (PubMed:21205667, PubMed:22362762, PubMed:6769474, PubMed:874324). The alternative complement pathway acts as an amplification loop that enhances complement activation by mediating the formation of C3 and C5 convertases (PubMed:21205667, PubMed:22362762, PubMed:6769474, PubMed:874324). Activated CFD cleaves factor B (CFB) when the latter is complexed with complement C3b, activating the C3 convertase of the alternative pathway (PubMed:21205667, PubMed:6769474, PubMed:874324, PubMed:9748277).
Cellular Location	Secreted

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