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Anti-CD88 Antibody

Catalog # AP60545

Product Information

Application	WB, IHC, IF/IC
Primary Accession	P21730
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	39336

Additional Information

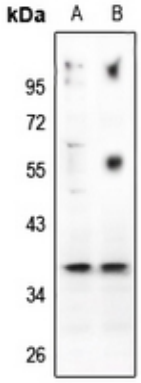
Gene ID	728
Other Names	C5AR; C5R1; C5a anaphylatoxin chemotactic receptor 1; C5a anaphylatoxin chemotactic receptor; C5a-R; C5aR; CD88
Target/Specificity	KLH-conjugated synthetic peptide encompassing a sequence within the C-term region of human CD88. The exact sequence is proprietary.
Dilution	WB~~WB (1/500 - 1/1000), IHC (1/100 - 1/200), IF/IC (1/100 - 1/500) IHC~~WB (1/500 - 1/1000), IHC (1/100 - 1/200), IF/IC (1/100 - 1/500) 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

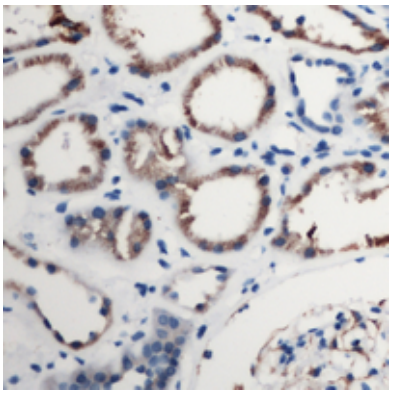
Name	C5AR1 {ECO:0000303|PubMed:37852260, ECO:0000312|HGNC:HGNC:1338}
Function	Receptor for the chemotactic and inflammatory peptide anaphylatoxin C5a, stimulating chemotaxis, granule enzyme release, intracellular calcium release and superoxide anion production (PubMed:10636859, PubMed:15153520, PubMed:1847994, PubMed:29300009, PubMed:36806352, PubMed:7622471, PubMed:8182049, PubMed:9553099). Ligand binding causes a conformation change that triggers signaling via guanine nucleotide-binding proteins (G proteins) and modulates the activity of downstream effectors, such as adenylate cyclase (PubMed:36806352, PubMed:37852260). C5AR1 is coupled to G(i)/G(o) (GNAI1 or GNAO1) G alpha proteins and mediates inhibition of adenylate cyclase (PubMed:36806352, PubMed:37852260). The ligand interacts with at least two sites on the receptor: a high-affinity site on the extracellular N-terminus, and a second site in the transmembrane region which activates downstream signaling events (PubMed:7622471, PubMed:8182049, PubMed:9553099).

Cellular Location	Cell membrane; Multi-pass membrane protein. Cytoplasmic vesicle. Note=Phosphorylated C5aR colocalizes with ARRB1 and ARRB2 in cytoplasmic vesicles

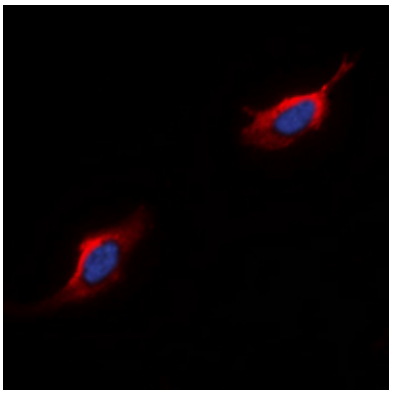
Images



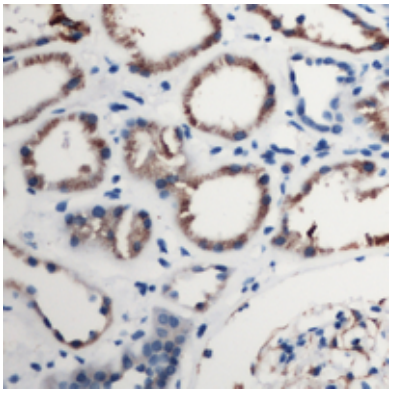
Western blot analysis of CD88 expression in A375 (A), HEK293T (B) whole cell lysates. (Predicted band size: 39 kD; Observed band size: 42 kD)



Immunohistochemical analysis of CD88 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 CD88 staining in HepG2 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 DyLight 594-conjugated secondary antibody (red) in PBS at room temperature in the dark. DAPI was used to stain the cell nuclei (blue).



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