

Purified Rabbit Anti-human C3aR

Catalog Number: TP504

Lot Number: 080718

Content: Protein A purified rabbit IgG, 200 µg, with 0.1% sodium azide, lyophilized.

(Reconstitute to 1 mg/ml by adding 200 µl H₂O)

Product Description and Usage: For research use only. This polyclonal antibody, which reacts with the human C3a receptor, was generated using *E. coli*-expressed human C3a receptor fragment (amino acids 161-332, corresponding to its second extracellular loop) as an immunogen. The antibody recognizes C3a receptor expressed in leukocytes and in transfected cells using flow cytometry.

Cross-reactivity to C3a receptor of other species has not been determined.

Storage Condition: 4°C for short term storage or -20°C in small aliquots for long term storage. Avoid repeated freeze and thaw.

Background: C3a is an anaphylatoxin generated through activation of the complement C3. C3a is a potent chemoattractant for phagocytes, and it stimulates chemotaxis and other leukocyte functions. C3a binds to eosinophils, basophils, neutrophils, and

differentiated U937 cells, that all express receptors for C3a on their cell surface. The C3a receptor has been cloned and shown to be a G protein-coupled receptor with seven putative transmembrane domains^{1,2}. This receptor is characterized for its large extracellular loop between the fourth and fifth transmembrane domains³. The loop can be readily detected using the rabbit anti-C3a receptor antibody.

References:

1. Crass, T, et al. (1996) Expression cloning of the human C3a anaphylatoxin receptor (C3aR) from differentiated U-937 cells. *Eur. J. Immunol.* 26:1944-50.
2. Ames, R.S., et al. (1996) Molecular cloning and characterization of the human anaphylatoxin C3a receptor. *J. Biol. Chem.* 271:20231-4.
3. Roglic S. et al., (1996) cDNA cloning of a novel G protein-coupled receptor with a large extracellular loop structure. *Biochim. Biophys. Acta* 1305:39-43.