

Rat anti-Mouse C3aR Monoclonal Antibody | anti-C3aR antibody

C3aR, Mouse, mAb 14D4

CATALOG # AAA77804	HOST Rat	REACTIVITY Mouse	APPLICATIONS Flow Cytometry, Functional Assay, Immunohistochemistry
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PRODUCT SYNONYMS

C3aR; Monoclonal Antibody; Mouse; mAb 14D4; anti-C3aR antibody

PRODUCT SPECIFICATIONS

Host	Rat
Reactivity	Mouse
Clonality	Monoclonal
Isotype	Rat IgG2a
Clone Number	14D4
Purity/Purification	Protein G
Form/Format	0.2um filtered in PBS + 0.1% BSA + 0.02% NaN ₃ For unit size 0.5 mg or larger: PBS only (concentration< 0.5mg/ml)
Applicable Applications for anti-C3aR antibody	FCM/FACS (Flow Cytometry), IHC (Immunohistochemistry)
Immunogen	RBL-2H3 transfectants expressing mouse C3aR
Preparation and Storage	Product should be stored at 4°C. The exact expiry date is indicated on the label.

ADDITIONAL INFORMATION

Related Product Information for anti-C3aR antibody	The monoclonal antibody 14D4 reacts with mouse C3aR, which is a member of the rhodopsin superfamily of 7-transmembrane G protein-coupled receptors, with a molecular weight of approximately 54 kDa. Expression of C3aR has been demonstrated on a wide variety of immune cells, including monocytes, macrophages, dendritic cells, neutrophils, basophils, eosinophils, mast cells, T lymphocytes and B lymphocytes. In addition, C3aR is found on cells of the central nervous system, lungs and kidney. In the course of complement activation C3aR functions as the cell surface receptor for C3a, which is the C-terminal 77 amino acid cleavage product of C3. C3a, possesses both anaphylatoxic and immunoregulatory properties, such as smooth muscle contraction, histamine release from mast cells, and enhanced vascular permeability. In addition, C3a induces respiratory burst in neutrophils and has chemotactic properties for eosinophils and mast cells. Moreover, C3a causes release of key cytokines from multiple cell types, including IL-1beta, TNF-alpha, IL-6 and IL-8. A role for C3aR has been implicated in several murine disease models. It was shown that C3aR inhibition reduces neurodegeneration in experimental lupus, whereas in a murine model of allergic airway disease, deletion of the C3a receptor protects against the changes in lung physiology seen after allergen challenge. Finally, it was shown that deletion of C3aR is protective in myelin oligodendrocyte glycoprotein-induced experimental autoimmune encephalomyelitis.
References	Kiafard Z, et al; Use of monoclonal antibodies to assess expression of anaphylatoxin receptors in tubular epithelial cells of human, murine and rat kidneys. Immunobiology 2007, 212: 129.

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.