TECHNICAL DATA SHEET

C5AR1 MAb

Catalog Number: CSB0027

DESCRIPTION

Target:	C5AR1
Target aliases:	C5AR, CD88, C5R1, C5A, C5a-R, C5aR
Fc isotype:	Mouse IgG2a
Membrane proteome specificity:	Monospecific for 6,000 membrane proteins tested
Species reactivity:	Human (others untested)
Epitope:	
Fc modifications:	C-terminal Avitag[1], disabled Fc-γ receptor binding[2]
Source:	Recombinant CHO expression; purified by Protein A chromatography
Formulation:	Endotoxin Free PBS pH 7.4, sterile-filtered
Concentration:	1 mg/ml

1. A peptide tag that can be biotinylated in vitro using the biotin ligase enzyme (BirA).
2. Mutated Fc-γ receptor binding site to minimize non-specific antibody binding to endogenously-expressed Fc-γ receptors on target cells.

C5AR1 TARGET INFORMATION

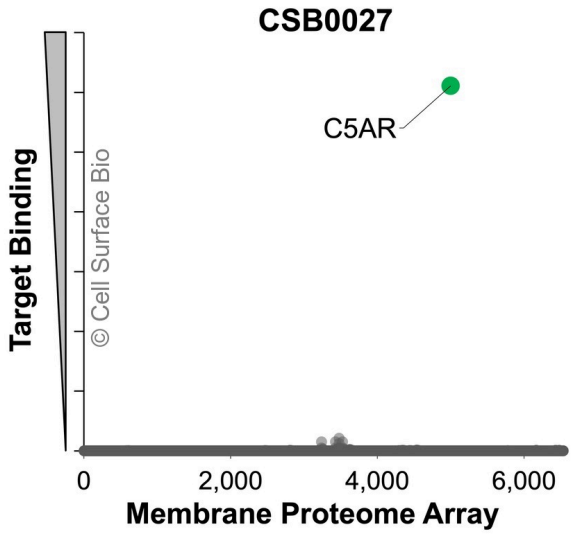
C5AR1 is a multi-pass transmembrane protein and a receptor for C5a, which is a chemotactic and inflammatory peptide anaphylatoxin. C5AR1 is involved in the complement component C5a signaling pathway and RNA polymerase II transcription and positively regulates the ERK1/2 cascade. C5AR1 is a biomarker for asthma, chronic obstructive pulmonary disease, severe acute respiratory syndrome, rhinitis, and Alzheimer's disease. (NCBI Gene: 728, UniProtKB/Swiss-Prot: P21730) Other names: C5AR, CD88, C5R1, C5A, C5a-R, C5aR

SHIPPING AND STORAGE

Shipping:	Shipped at ambient temperature. Store at 4°C.
Stability & Storage:	Stable for 12 months from date of receipt when stored at 4°C. Avoid repeated freeze-thaw cycles.

VALIDATION DATA

Membrane Proteome Specificity



The specificity of C5AR1 Monoclonal Antibody (CSB0027) was tested on the Membrane Proteome Array™ and shown to be specific for human C5AR1.

The Membrane Proteome Array™ contains 6,000 different human membrane proteins, each expressed in unfixed human cells to ensure native conformation and post-translational modifications. The Membrane Proteome Array™ represents the industry standard for determining the binding specificity of antibodies and other protein ligands.

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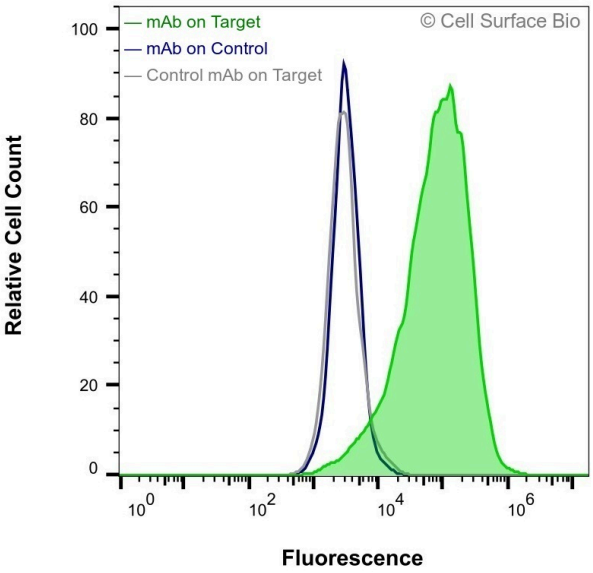
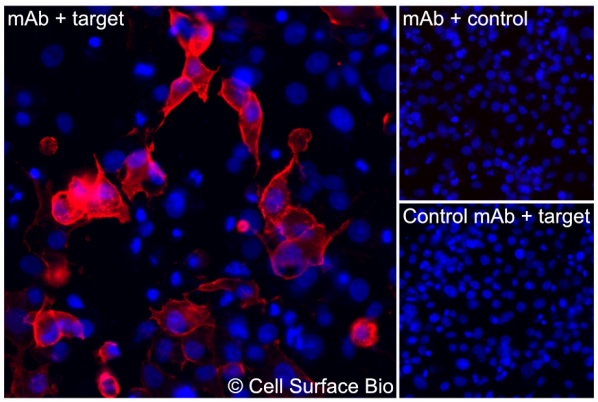
Applications	Conditions	Recommended concentration
Flow Cytometry, Extracellular	Live, Unpermeabilized	1 µg/ml



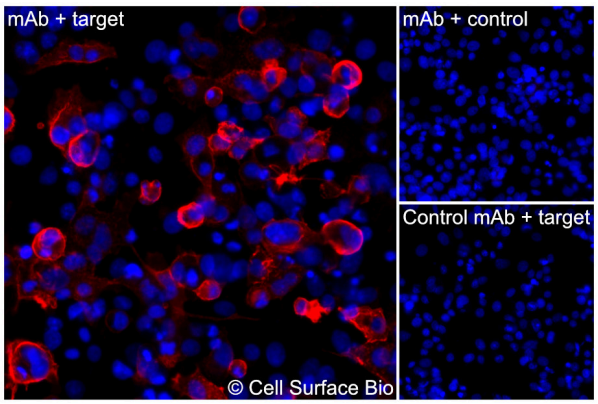
HEK-293F cells transiently transfected with human C5AR1 were stained with C5AR1 Monoclonal Antibody (CSB0027) (green) or isotype control antibody (gray), followed by AlexaFluor 647-conjugated anti-mouse IgG secondary antibody. HEK-293F cells transiently transfected with an empty control vector were also stained with C5AR1 Monoclonal Antibody (CSB0027) (blue).

Applications	Conditions	Recommended concentration
Immunofluorescence, Extracellular	Fixed 4% paraformaldehyde	1 µg/ml



(A) COS-7 cells transiently transfected with human C5AR1 were stained with C5AR1 Monoclonal Antibody (CSB0027) followed by AlexaFluor 647 anti-mouse IgG secondary antibody (red) and DAPI (blue). (B) COS-7 cells transiently transfected with an empty control vector stained with C5AR1 Monoclonal Antibody. (C) Isotype control: COS-7 cells transfected with human C5AR1 and stained with control MAb.

Applications	Conditions	Recommended concentration
Immunofluorescence, Intracellular	Fixed 4% paraformaldehyde, Permeabilized 0.1% Triton X-100	1 µg/ml



(A) COS-7 cells transiently transfected with human C5AR1 were permeabilized and stained with C5AR1 Monoclonal Antibody (CSB0027) followed by AlexaFluor 647 anti-mouse IgG secondary antibody (red) and DAPI (blue). (B) COS-7 cells transiently transfected with an empty control vector stained with C5AR1 Monoclonal Antibody. (C) Isotype control: COS-7 cells transfected with human C5AR1 and stained with control MAb.