

DESCRIPTION

Target:	CXCR4
Target aliases:	LESTR, Fusin, HM89, D2S201E, NPYY3R, HSY3RR, NPY3R, CD184, NPYR, LAP-3, NPYRL, FB22, LCR1, WHIMS1, CXC-R4, CXCR-4, WHIMS, LAP3, WHIM
Fc isotype:	IgG2a
Membrane proteome specificity:	Monospecific for 6,000 membrane proteins tested
Species reactivity:	Human (Others untested)
Extracellular epitope:	Yes
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.

CXCR4 TARGET INFORMATION

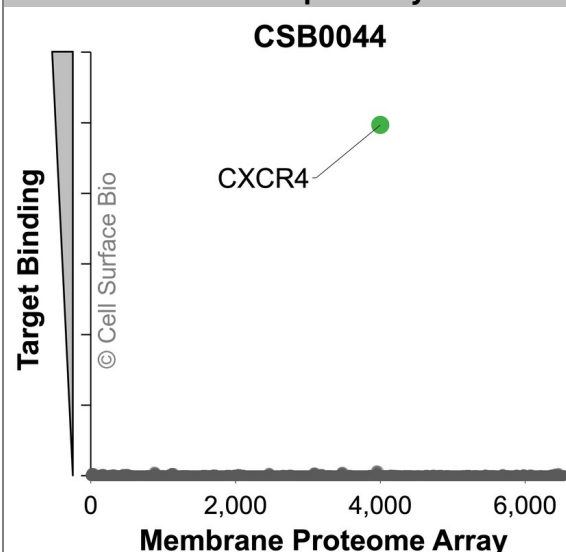
CXCR4 is a multi-pass transmembrane protein and CXC chemokine receptor. CXCR4 is involved in a variety of biological processes as a receptor for stromal cell-derived factor-1, ubiquitin, bacterial lipopolysaccharide and a coreceptor for HIV-1. CXCR4 is also associated with breast cancer and WHIM syndrome. (NCBI Gene: 7852, UniProtKB/Swiss-Prot: P61073) Other names: LESTR, Fusin, HM89, D2S201E, NPYY3R, HSY3RR, NPY3R, CD184, NPYR, LAP-3, NPYRL, FB22, LCR1, WHIMS1, CXC-R4, CXCR-4, WHIMS, LAP3, WHIM

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

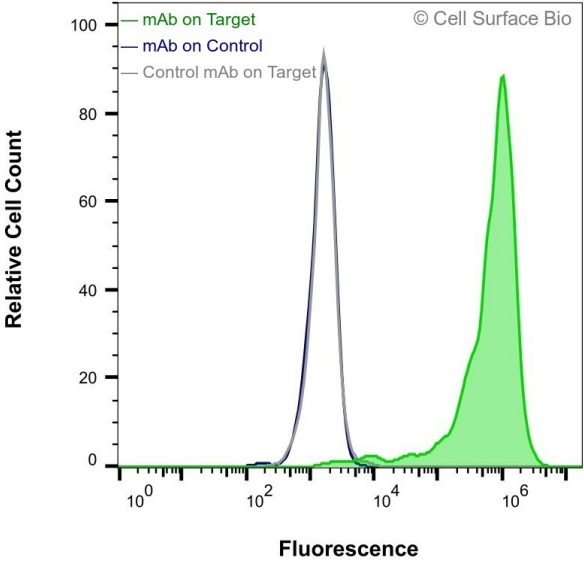
Membrane Proteome Specificity



The specificity of CXCR4 Monoclonal Antibody (CSB0044) was tested on the Membrane Proteome Array™ and shown to be specific for CXCR4.

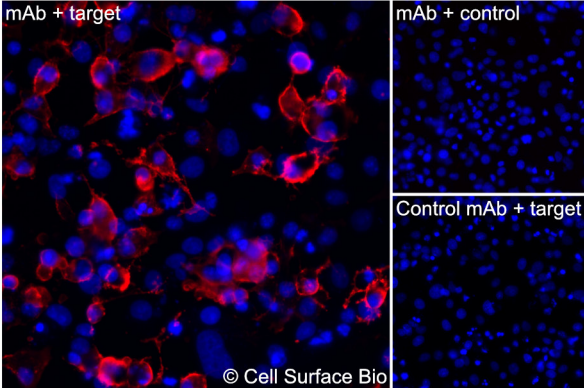
The Membrane Proteome Array™ contains 6,000 different human membrane proteins, each expressed in unfixed avian cells to ensure native conformation and post-translational modifications. The Membrane Proteome Array™ represents the industry standard for determining the binding specificity of antibodies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

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



JS-1 cells transiently transfected with CXCR4 were stained with CXCR4 Monoclonal Antibody (CSB0044)(green) or isotype control antibody (gray), followed by AlexaFluor 647- conjugated anti- IgG secondary antibody. JS-1 cells transiently transfected with an empty control vector were also stained with CXCR4 Monoclonal Antibody (CSB0044)(blue).

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



(Left) COS-7 cells transiently transfected CXCR4 were stained with CXCR4 Monoclonal Antibody (CSB0044) followed by AlexaFluor 647 anti- IgG secondary antibody (red) and DAPI (blue). (Top right) COS-7 cells transiently transfected with an empty control vector stained with CXCR4 Monoclonal Antibody. (Bottom right) Isotype control: COS-7 cells transfected with CXCR4 and stained with control MAb.

Applications

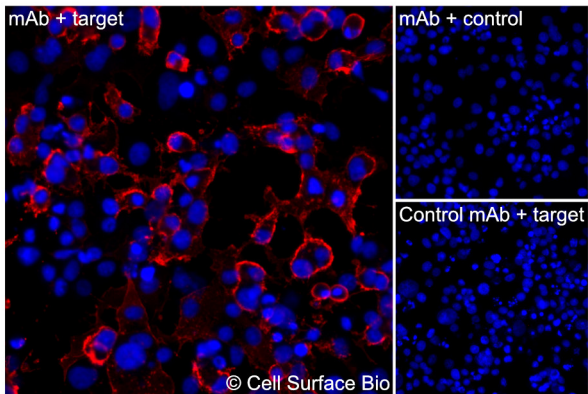
Immunofluorescence, Intracellular

Conditions

Fixed 4 % paraformaldehyde,
Permeabilized 0.1% Triton X-100

Recommended concentration

1 µg/ml



(Left) COS-7 cells transiently transfected CXCR4 were permeabilized and stained with CXCR4 Monoclonal Antibody (CSB0044) followed by AlexaFluor 647 anti- IgG secondary antibody (red) and DAPI (blue). (Top right) COS-7 cells transiently transfected with an empty control vector stained with CXCR4 Monoclonal Antibody. (Bottom right) Isotype control: COS-7 cells transfected with {{target}} and stained with control MAb.