

DESCRIPTION

Target:	MRGPRX4
Target aliases:	MRGX4, Mas-Related G-Protein Coupled Receptor Member X4, MAS-Related GPR, Member X4, SNSR6
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

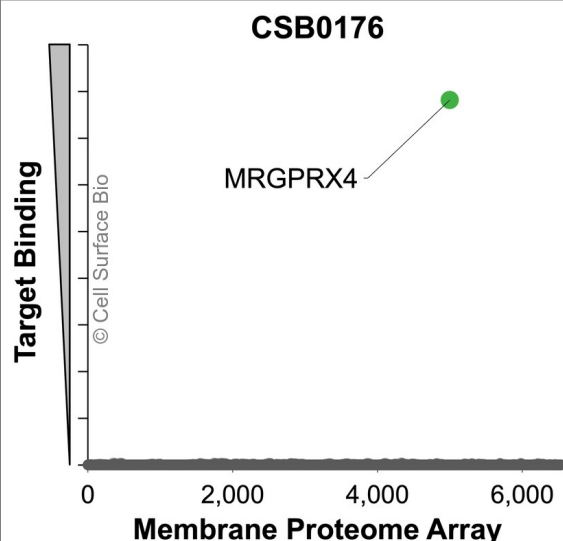
1. A peptide tag that can be biotinylated in vitro using the biotin ligase enzyme (BirA).
2. Mutated Fc-γ receptor binding site to minimize non-specific antibody binding.

MRGPRX4 TARGET INFORMATION

Mas-related G-protein coupled receptor member X4 (MRGPRX4) is a member of the class A rhodopsin-like G protein-coupled receptor (GPCR) family, encoded by the MRGPRX4 gene. It is part of the MAS-related GPCR subfamily and is localized to the cell membrane. MRGPRX4 has been shown to act as a receptor for bile acids and triggers intracellular calcium release through Gq/11-mediated signaling. Its function is supported by data from heterologous expression systems, and its physiological role remains incompletely characterized. (NCBI Gene: 117196, UniProtKB/Swiss-Prot: Q96LA9) Other names: MRGX4, Mas-Related G-Protein Coupled Receptor Member X4, MAS-Related GPR, Member X4, SNSR6

SHIPPING AND STORAGE

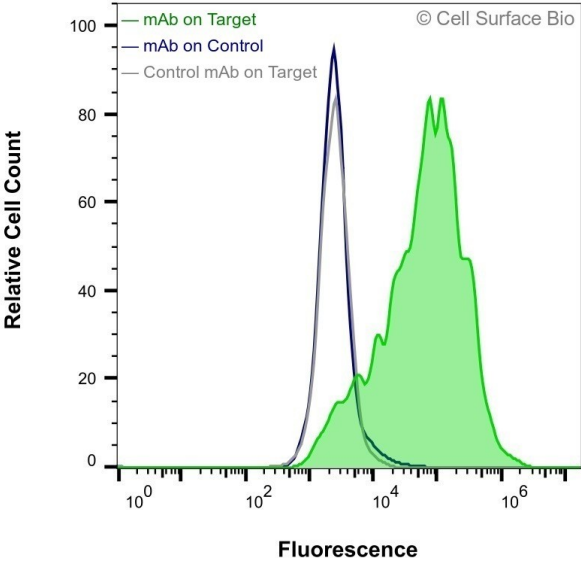
Shipping:	Shipped at ambient temperature. Store at 4°C.
Stability & Storage:	Stable for 12 months from date of receipt when stored at 4°C. Avoid repeated freeze-thaw cycles.

VALIDATION DATA
Membrane Proteome Specificity


The specificity of MRGPRX4 Monoclonal Antibody (CSB0176) was tested on the Membrane Proteome Array™ and shown to be specific for MRGPRX4.

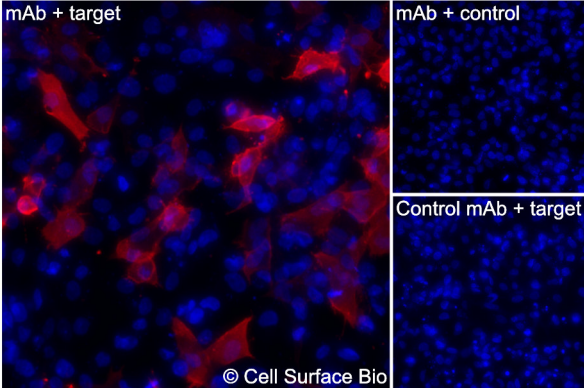
The Membrane Proteome Array™ contains 6,000 different human membrane proteins, each expressed in unfixed human cells to ensure native conformation and post-translational modifications. The Membrane Proteome Array™ represents the industry standard for determining the binding specificity of antibodies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

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



HEK-293F cells transiently transfected with MRGPRX4 were stained with MRGPRX4 Monoclonal Antibody (CSB0176) (green) or isotype control antibody (gray), followed by AlexaFluor 647- conjugated anti- IgG secondary antibody. HEK-293F cells transiently transfected with an empty control vector were also stained with MRGPRX4 Monoclonal Antibody (CSB0176) (blue).

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



(Left) JS-1 cells transiently transfected MRGPRX4 were stained with MRGPRX4 Monoclonal Antibody (CSB0176) followed by AlexaFluor 647 anti- IgG secondary antibody (red) and DAPI (blue). (Top right) JS-1 cells transiently transfected with an empty control vector stained with MRGPRX4 Monoclonal Antibody. (Bottom right) Isotype control: JS-1 cells transfected with MRGPRX4 and stained with control MAb.

Applications	Conditions	Recommended concentration
Immunofluorescence, Intracellular	Fixed 4 % paraformaldehyde, Permeabilized 0.1% Triton X-100	1 µg/ml
mAb + target mAb + control Control mAb + target © Cell Surface Bio (Left) JS-1 cells transiently transfected MRGPRX4 were permeabilized and stained with MRGPRX4 Monoclonal Antibody (CSB0176) followed by AlexaFluor 647 anti- IgG secondary antibody (red) and DAPI (blue). (Top right) JS-1 cells transiently transfected with an empty control vector stained with MRGPRX4 Monoclonal Antibody. (Bottom right) Isotype control: JS-1 cells transfected with {{target}} and stained with control MAb.		