

DESCRIPTION

Target:	MRGPRX1
Target aliases:	GPCR, MGRG2, MRGX1, SNSR4
Fc isotype:	Mouse IgG2a
Membrane proteome specificity:	Monospecific for 6,000 membrane proteins tested
Species reactivity:	Human (Others untested)
Epitope:	Extracellular
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

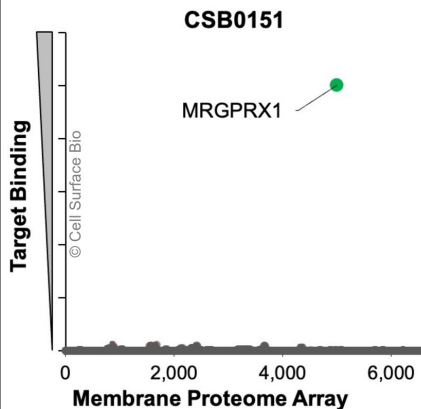
1. A peptide tag that can be biotinylated in vitro using the biotin ligase enzyme (BirA).
2. Mutated Fc- γ receptor binding site to minimize non-specific antibody binding.

MRGPRX1 TARGET INFORMATION

MRGPRX1 is predicted to be a transmembrane G-protein coupled receptor on the plasma membrane. MRGPRX1 is activated by high concentrations of the antimalarial drug chloroquine and may be associated with chloroquine-induced itch. It may play a role in nociceptor function or development. (NCBI Gene: 259249, UniProtKB/Swiss-Prot: Q96LB2) Other names: GPCR, MGRG2, MRGX1, SNSR4

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 MRGPRX1 Monoclonal Antibody (CSB0151) was tested on the Membrane Proteome Array™ and shown to be specific for human MRGPRX1.

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

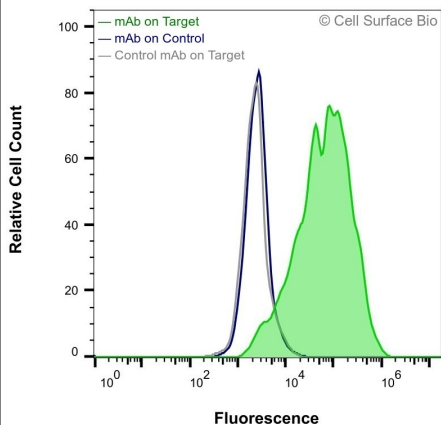
Flow Cytometry, Extracellular

Conditions

Live, Unpermeabilized

Recommended concentration

1 µg/ml



HEK-293F cells transiently transfected with human MRGPRX1 were stained with MRGPRX1 Monoclonal Antibody (CSB0151) (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 MRGPRX1 Monoclonal Antibody (CSB0151) (blue).

Applications

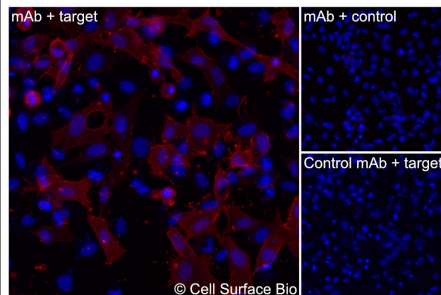
Immunofluorescence, Extracellular

Conditions

Fixed 4% paraformaldehyde

Recommended concentration

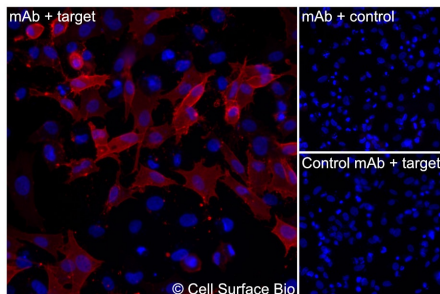
1 µg/ml



(Left) JS-1 cells transiently transfected human MRGPRX1 were stained with MRGPRX1 Monoclonal Antibody (CSB0151) followed by AlexaFluor 647 anti-Mouse IgG secondary antibody (red) and DAPI (blue). (Top right) JS-1 cells transiently transfected with an empty control vector stained with MRGPRX1 Monoclonal Antibody. (Bottom right) Isotype control: JS-1 cells transfected with human MRGPRX1 and stained with control MAb.

Applications

Immunofluorescence, Intracellular

ConditionsFixed 4% paraformaldehyde,
Permeabilized 0.1% Triton X-100**Recommended concentration**1 $\mu\text{g/ml}$ 

(Left) JS-1 cells transiently transfected human MRGPRX1 were permeabilized and stained with MRGPRX1 Monoclonal Antibody (CSB0151) followed by AlexaFluor 647 anti-Mouse IgG secondary antibody (red) and DAPI (blue). (Top right) JS-1 cells transiently transfected with an empty control vector stained with MRGPRX1 Monoclonal Antibody. (Bottom right) Isotype control: JS-1 cells transfected with human MRGPRX1 and stained with control MAb.