

DESCRIPTION

Target:	GPRC5D
Target aliases:	GPCR family C group 5 member D, G Protein-Coupled Receptor, Class C, Group 5, Member D, G-Protein Coupled Receptor Family C Group 5 Member D, Orphan G-Protein Coupled Receptor
Fc isotype:	Mouse 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

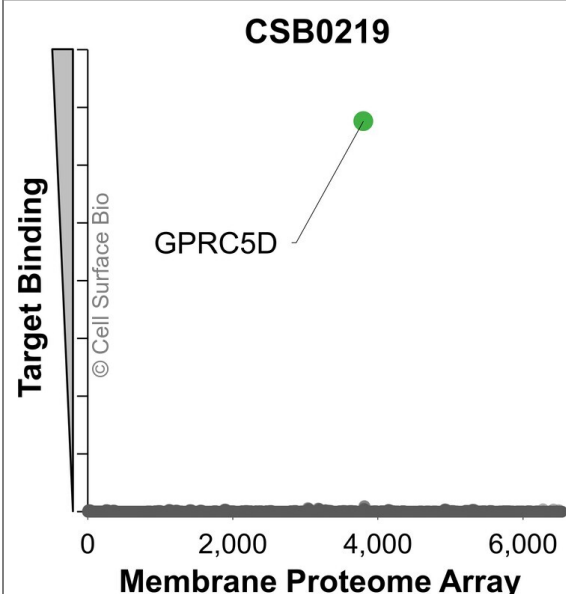
1. A peptide tag that can be biotinylated in vitro using the biotin ligase enzyme (BirA).
2. Mutated Fc-γ receptor binding site to minimize non-specific antibody binding.

GPRC5D TARGET INFORMATION

G protein-coupled receptor class C group 5 member D (GPRC5D) is a member of the class C G protein-coupled receptor family, characterized by seven transmembrane helices typical of GPCRs and a relatively short extracellular N-terminus compared to other class C receptors. It is primarily expressed in keratinized tissues, including hair follicles, and plasma cells. GPRC5D is a therapeutic target for multiple myeloma. The endogenous ligand and definitive biological function of GPRC5D have not been clearly established in experimentally supported database annotations. Its structural features are consistent with signaling through heterotrimeric G proteins. (NCBI Gene: 55507, UniProtKB/Swiss-Prot: Q9NZD1) Other names: GPCR family C group 5 member D, G Protein-Coupled Receptor, Class C, Group 5, Member D, G-Protein Coupled Receptor Family C Group 5 Member D, Orphan G-Protein Coupled Receptor

SHIPPING AND STORAGE

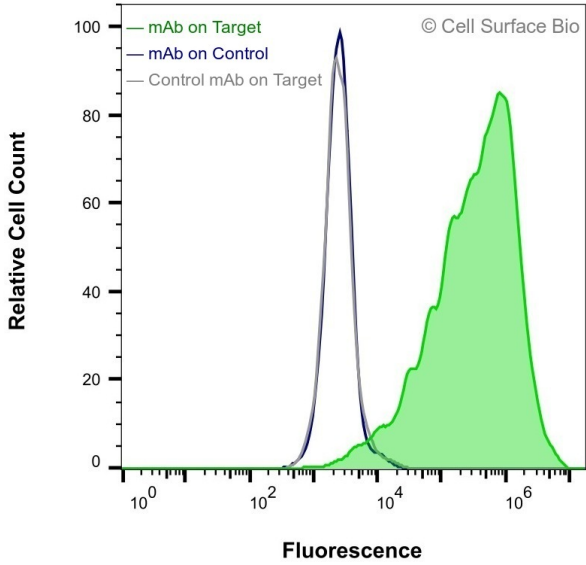
Shipping:	Shipped at ambient temperature. Store at 4°C.
Stability & Storage:	Stable for 12 months from date of receipt when stored at 4°C. Avoid repeated freeze-thaw cycles.

VALIDATION DATA
Membrane Proteome Specificity


The specificity of GPRC5D Monoclonal Antibody (CSB0219) was tested on the Membrane Proteome Array™ and shown to be specific for GPRC5D.

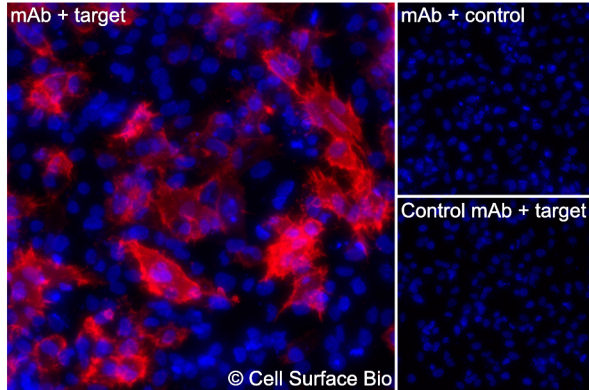
The Membrane Proteome Array™ contains 6,000 different human membrane proteins, each expressed in unfixed Human cells to ensure native conformation and post-translational modifications. The Membrane Proteome Array™ represents the industry standard for determining the binding specificity of antibodies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

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



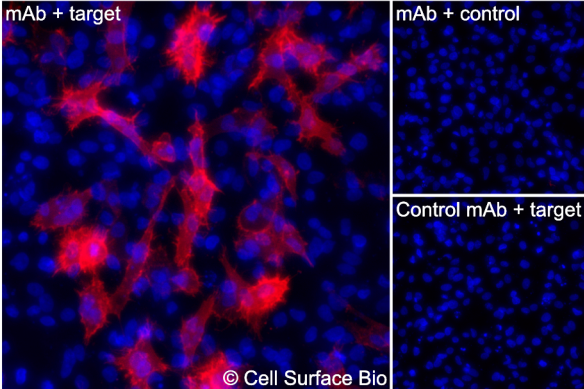
HEK-F cells transiently transfected with GPRC5D were stained with GPRC5D Monoclonal Antibody (CSB0219)(green) or isotype control antibody (gray), followed by AlexaFluor 647- conjugated anti- IgG secondary antibody. HEK-F cells transiently transfected with an empty control vector were also stained with GPRC5D Monoclonal Antibody (CSB0219)(blue).

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



(Left) JS-1 cells transiently transfected GPRC5D were stained with GPRC5D Monoclonal Antibody (CSB0219) 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 GPRC5D Monoclonal Antibody. (Bottom right) Isotype control: JS-1 cells transfected with GPRC5D and stained with control MAb.

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



(Left) JS-1 cells transiently transfected GPRC5D were permeabilized and stained with GPRC5D Monoclonal Antibody (CSB0219) 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 GPRC5D Monoclonal Antibody. (Bottom right) Isotype control: JS-1 cells transfected with {{target}} and stained with control MAb.