

## DESCRIPTION

|                                       |                                                                                                                                                                                        |
|---------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Target:</b>                        | GPRC5C                                                                                                                                                                                 |
| <b>Target aliases:</b>                | G Protein-Coupled Receptor Class C Group 5 Member C, RAIG-3, Retinoic Acid-Induced Gene 3 Protein, RAIG3, Retinoic Acid Responsive Gene Protein 3, Orphan G-Protein Coupled Receptor 3 |
| <b>Fc isotype:</b>                    | IgG2a                                                                                                                                                                                  |
| <b>Membrane proteome specificity:</b> | Monospecific for 6,000 membrane proteins tested                                                                                                                                        |
| <b>Species reactivity:</b>            | Human (Others untested)                                                                                                                                                                |
| <b>Extracellular epitope:</b>         | Yes                                                                                                                                                                                    |
| <b>Fc modifications:</b>              | C-terminal Avitag <sup>1</sup> , disabled Fc-γ receptor binding <sup>2</sup>                                                                                                           |
| <b>Source:</b>                        | Recombinant CHO expression; purified by Protein A chromatography                                                                                                                       |
| <b>Formulation:</b>                   | Endotoxin Free PBS pH 7.4, sterile-filtered                                                                                                                                            |
| <b>Concentration:</b>                 | 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.

## GPRC5C TARGET INFORMATION

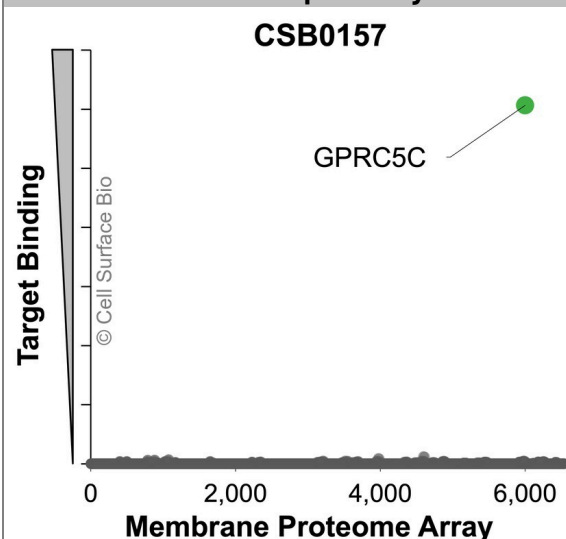
GPRC5C belongs to the type 3 G protein-coupled receptor (GPCR) family, specifically classified within family C, which is characterized by a signature seven-transmembrane domain structure. It is an orphan receptor, meaning its endogenous ligand is unknown. GPRC5C is predominantly expressed in the kidney and pancreas, with additional expression in liver and other tissues. Its biological function has not been conclusively determined. (NCBI Gene: 55890, UniProtKB/Swiss-Prot: Q9NQ84) Other names: G Protein-Coupled Receptor Class C Group 5 Member C, RAIG-3, Retinoic Acid-Induced Gene 3 Protein, RAIG3, Retinoic Acid Responsive Gene Protein 3, Orphan G-Protein Coupled Receptor 3

## SHIPPING AND STORAGE

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

## VALIDATION DATA

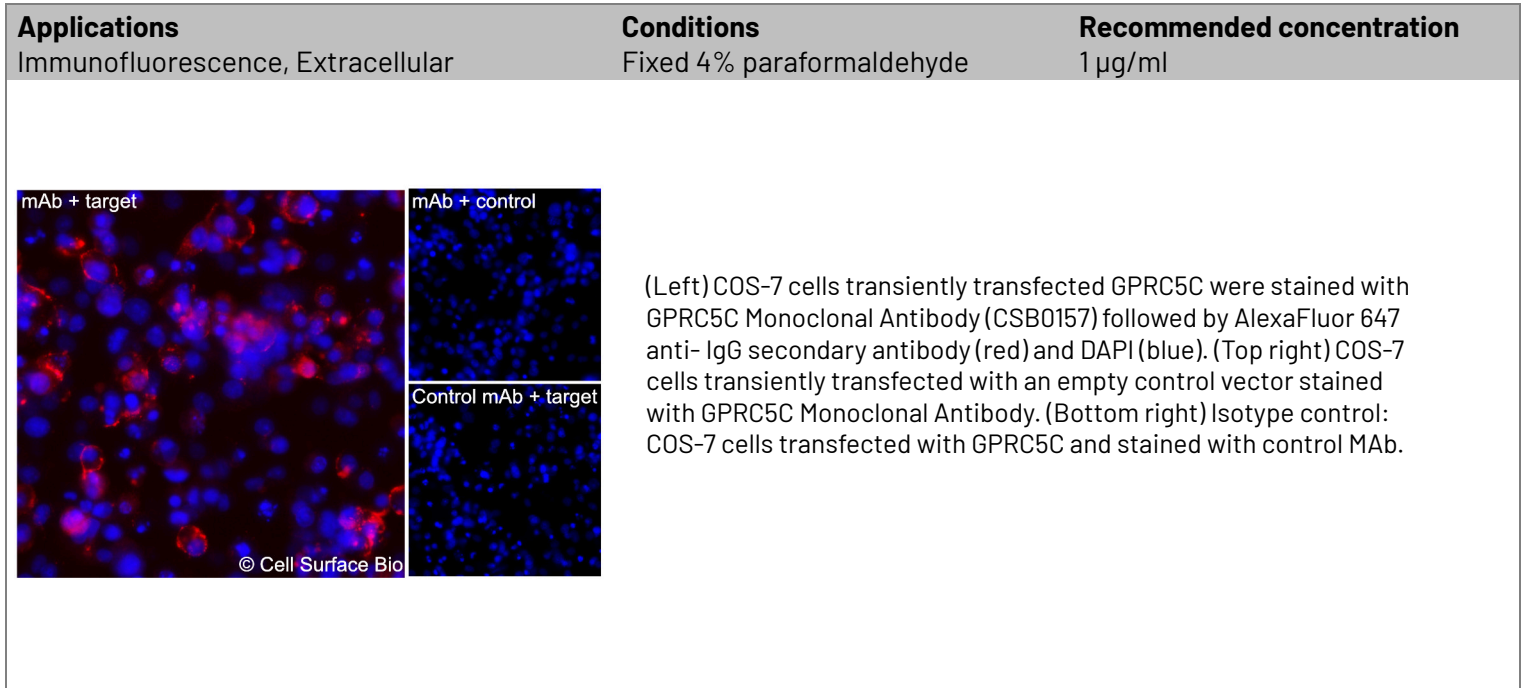
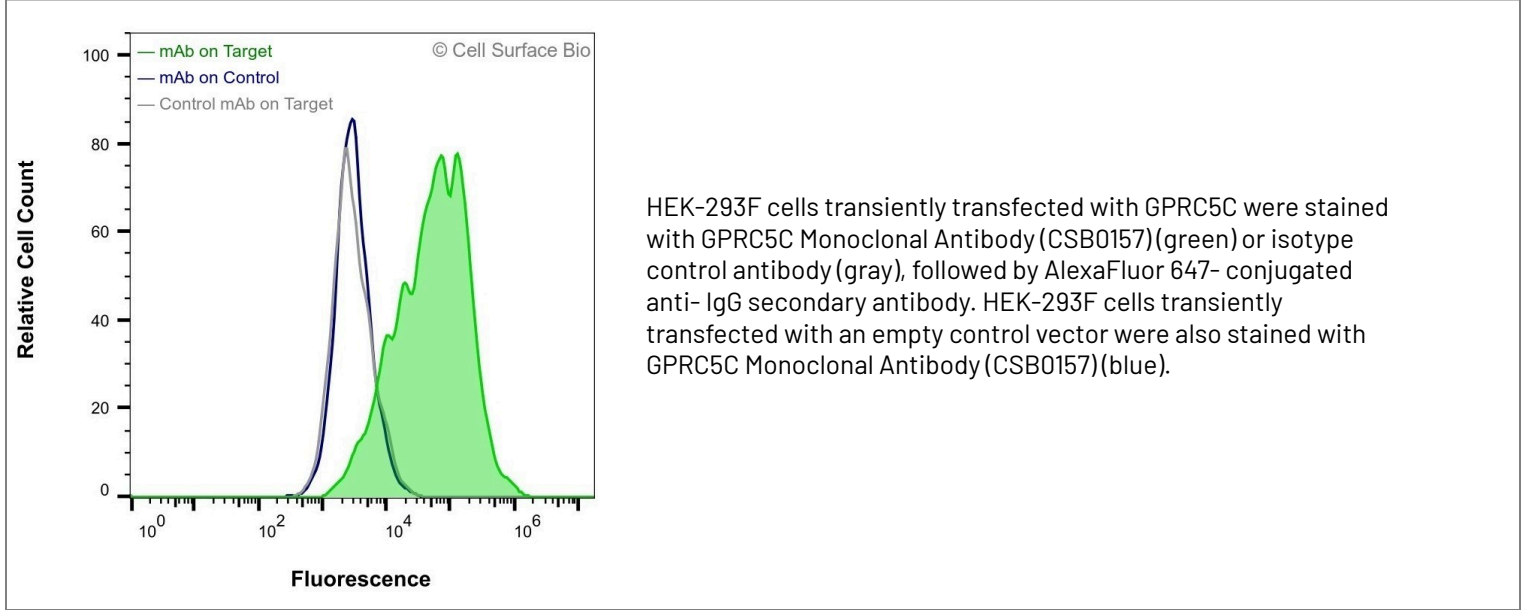
### Membrane Proteome Specificity



The specificity of GPRC5C Monoclonal Antibody (CSB0157) was tested on the Membrane Proteome Array™ and shown to be specific for GPRC5C.

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                   |



| Applications                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Conditions                                                    | Recommended concentration |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------|---------------------------|
| Immunofluorescence, Intracellular                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Fixed 4% paraformaldehyde,<br>Permeabilized 0.1% Triton X-100 | 1 µg/ml                   |
| <div> <div> <div>mAb + target</div> <div>© Cell Surface Bio</div> </div> <div> <div>mAb + control</div> <div>Control mAb + target</div> </div> </div> <p>(Left) COS-7 cells transiently transfected GPRC5C were permeabilized and stained with GPRC5C Monoclonal Antibody (CSB0157) 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 GPRC5C Monoclonal Antibody. (Bottom right) Isotype control: COS-7 cells transfected with {{target}} and stained with control MAb.</p> |                                                               |                           |