

**PRODUCT INFORMATION**

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| <b>Tag</b>                              | C-Flag&Strep Tag                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>Target</b>                           | MRGX1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Synonyms</b>                         | GPCR, MGRG2, MRGX1, SNSR4                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>Description</b>                      | Human MRGX1-Strep full length protein-synthetic nanodisc                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>Delivery</b>                         | 6~8weeks                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>Uniprot ID</b>                       | Q96LB2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>Expression Host</b>                  | HEK293                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>Protein Families</b>                 | GPCR,Transmembrane,Druggable Genome,                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>Protein Pathways</b>                 | N/A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>Molecular Weight</b>                 | The human full length MRGX1-Strep protein has a MW of 36.3 kDa                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>Formulation &amp; Reconstitution</b> | Lyophilized from nanodisc solubilization buffer (20 mM Tris-HCl, 150 mM NaCl, pH 8.0). Normally 5% - 8% trehalose is added as protectants before lyophilization. Please see Certificate of Analysis for specific instructions. Do not use solvents with a pH below 6.5 or those containing high concentrations of divalent metal ions (greater than 5 mM) in subsequent experiments.                                                                                                                                                                                                                                                                                   |
| <b>Storage &amp; Shipping</b>           | Store at -20°C to -80°C for 12 months in lyophilized form. After reconstitution, if not intended for use within a month, aliquot and store at -80°C (Avoid repeated freezing and thawing). Lyophilized proteins are shipped at ambient temperature.                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>Background</b>                       | Orphan receptor. Probably involved in the function of nociceptive neurons. May regulate nociceptor function and/or development, including the sensation or modulation of pain. Potently activated by enkephalins including BAM22 (bovine adrenal medulla peptide 22) and BAM (8-22)(PubMed:26582731). BAM22 is the most potent compound and evoked a large and dose-dependent release of intracellular calcium in stably transfected cells. G(alpha)q proteins are involved in the calcium-signaling pathway. Activated by the antimalarial drug, chloroquine. May mediate chloroquine-induced itch, in a histamine-independent manner.[UniProtKB/Swiss-Prot Function] |
| <b>Usage</b>                            | Research use only                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>Conjugate</b>                        | Unconjugated                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |

