

Recombinant Rat V2R Protein

For Research Use Only

1. Basic Product Information

Catalog No.: REP52440

Size: 10ug, 100ug

Protein Name: Vasopressin V2 receptor (V2R) (AVPR V2) (Antidiuretic hormone receptor) (Renal-type arginine vasopressin receptor)

Synonym: Avpr2

UniProt ID: Q00788

UniProt Link: www.uniprot.org/uniprotkb/Q00788/entry

Species Source: Rat

Expression System: HEK293T eukaryotic cell expression system Sequence

Length: 371 AA

Molecular Weight: 41 KD

Protein Tag: C-terminal His6

2. Amino Acid Sequence

MLLVSTVSAVPGLFSPSPSSPNSSQEELLDDRDPLLVRaelALLSTIFVAVALSNGLVLGALIRRGRR
GRWAPMHVFISHLCLADLAVALFQVLPQLAWDATDRFHGPDALCRAVKYLQMVGMYASSYMILAMT
LDRHRAICRPMLAYRHGGGARWNRPVLVAWAFSLLSLPQLFIFAQRDVGNGSGVFDCWARFAEP
WGLRAYVTWIALMVFVAPALGIAACQVLIFREIHASLVPGPSEAGRRRRGRRTGSPSEGAHVSAAM
AKTVRMTLVIVIVYVLCWAPFFLVQLWAAWDPEAPLERPPFVLLMLLASLNSCTNPWIYASFSSSVSS
ELRSLCCAQRHTTHSLGPQDESCATASSSLMKDTPS

3. Buffer Composition

Liquid format: PBS-based buffer containing 50% glycerol. Glycerol concentration can be customized upon customer request; please state special requirements when placing your order.

Lyophilized format: Buffer before lyophilization is PBS supplemented with 6% trehalose.

4. Storage Conditions

Upon receipt, store the product at -20 °C or -80 °C. Aliquot the product for on-demand use to preserve protein activity and prevent denaturation and inactivation caused by repeated freeze-thaw cycles.

5. Product Description

This product is recombinant Vasopressin V2 receptor (V2R) (AVPR V2) (Antidiuretic hormone receptor) (Renal-type arginine vasopressin receptor) produced using the HEK293T eukaryotic cell expression system. It is suitable for in-vitro functional assays, protein-protein interaction studies, antibody preparation and other biomedical research applications.

Protein Function: G protein-coupled receptor for arginine vasopressin, an antidiuretic that promotes renal water reabsorption (PubMed:1534150). Ligand binding causes a conformation change that triggers signaling via guanine nucleotide-binding proteins (G proteins) and modulates the activity of downstream effectors, such as adenylate cyclase (cAMP) (By similarity). AVPR2 is coupled to G(s) G alpha proteins and mediates activation of adenylate cyclase activity (By similarity).

Subcellular Localization: Cell membrane ; Multi-pass membrane protein .

6. Notes

- Avoid repeated freeze-thaw cycles to maintain protein stability and biological activity.
- Please specify special buffer-composition requirements at the time of order placement.
- For research use only. Not intended for clinical diagnosis, therapeutic use or commercial manufacturing.