

Recombinant Rat AGTRA Protein

For Research Use Only

1. Basic Product Information

Catalog No.: REP52324

Size: 10ug, 100ug

Protein Name: Type-1 angiotensin II receptor A (Angiotensin II type-1 receptor A) (AT1 receptor A)

Synonym: Agtr1, Agtr1a, At1a

UniProt ID: P25095

UniProt Link: www.uniprot.org/uniprotkb/P25095/entry

Species Source: Rat

Expression System: HEK293T eukaryotic cell expression system Sequence

Length: 359 AA

Molecular Weight: 41 KD

Protein Tag: C-terminal His6

2. Amino Acid Sequence

MALNSSAEDGIKRIQDDCPKAGRHSYIFVMIPTLYSIIFVVGIFGNSLVVIVYFYMKLKTVASVFLLNLA
LADLCFLLTLPLWAVYTAMEYRWPFGNHLCKIASASVSFNLYASVFLLTCLSIDRYLAIVHPMKSLRR
TMLVAKVTCIIIWLMAGLASLPVAVIHRNVYFIENTNITVCAFHYESRNSTLPIGLGLTKNILGFLFPFLIILT
SYTLIWKALKKKAYEIQKNKPRNDDIFRIIMAIVLFFFFSWVPHQIFTFLDVLIQLGVIHDCCKISDIVDTAMPI
TICIAYFNNCLNPLFYGFLGKKFKKYFLQLLKYIPPAKSHSSLSTKMSTLSYRPSDNMSSSAKKPASC
FEVE

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 Type-1 angiotensin II receptor A (Angiotensin II type-1 receptor A) (AT1 receptor A) 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: Receptor for angiotensin II, a vasoconstricting peptide, which acts as a key regulator of blood pressure and sodium retention by the kidney (PubMed:10747880, PubMed:2041570). The activated receptor in turn couples to G-alpha proteins G(q) (GNAQ, GNA11, GNA14 or GNA15) and thus activates phospholipase C and increases the cytosolic Ca(2+) concentrations, which in turn triggers cellular responses such as stimulation of protein kinase C (PubMed:10747880).

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.