

Recombinant Human AACT Protein

For Research Use Only

1. Basic Product Information

Catalog No.: REP50005

Size: 10ug, 100ug

Protein Name: Alpha-1-antichymotrypsin (ACT) (Cell growth-inhibiting gene 24/25 protein) (Serpina3) [Cleaved into: Alpha-1-antichymotrypsin His-Pro-less]

Synonym: SERPINA3, AACT, GIG24, GIG25

UniProt ID: P01011

UniProt Link: www.uniprot.org/uniprotkb/P01011/entry

Species Source: Human

Expression System: HEK293T eukaryotic cell expression system Sequence

Length: 423 AA

Molecular Weight: 48 KD

Protein Tag: C-terminal His6

2. Amino Acid Sequence

MERMLPLLALGLLAAGFCPAVLCHPN SPLDEENLTQENQDRGTHVDLGLASANVDFAFSLYKQLVLK
APDKNVIFSP LSISTALAFSLGAHNTTLTEILKGLKFNL TETSEAEIHQS FQHLLRTL NQSSDELQLSM
GNAMFVKEQLSLLDRFTEDAKRLYGSEAFATDFQDSAAAKKLINDYVKNGTRGKITDLIKDLD SQTM
MVLVNYIFFKAKWEMPFD PQDTHQSRFYLSKKKWVMVPMMSLHHLTIPYFRDEELSCTVVELKYTG
NASALFILPDQDKMEEVEAMLLPETLKRWRDSLEFREIGELYLPKFSISR DYNLNDILLQLGIEEAFTSK
ADLSGITGARNLAVSQVVHKAVLDVFEEGTEASAATAVKITLLSALVETRTIVRFNRPFLMIIVPTDTQN
IFFMSKVTNPKQA

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 Alpha-1-antichymotrypsin (ACT) (Cell growth-inhibiting gene 24/25 protein) (Serpine A3) [Cleaved into: Alpha-1-antichymotrypsin His-Pro-less] 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: Although its physiological function is unclear, it can inhibit neutrophil cathepsin G and mast cell chymase, both of which can convert angiotensin-1 to the active angiotensin-2.

Subcellular Localization: Secreted.

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.