



Recombinant Human ACTA2 Protein Product Manual

1. Product Basic Information

Product No.: REP06033

Protein Name: Alpha-Cardiac Actin (ACTA2)

Aliases: ACTSA; SMDYS; alpha-cardiac actin; actin, aortic smooth muscle; actin alpha 2, smooth muscle; actin, alpha 2, smooth muscle, aorta; cell growth-inhibiting gene 46 protein

UniProt ID: P62736

UniProt Link: <https://www.uniprot.org/uniprotkb/P62736/entry>

Species Source: Homo sapiens (Human)

Expression System: E.coli

Protein Length: Full Length of Mature Protein (3-377aa)

Molecular Weight: 47.8 kDa

Protein Tag: N-terminal 10xHis-tagged

2. Amino Acid Sequence (3-377aa)

EEEDSTALVCDNGSGLCKAGFAGDDAPRAVFPSIVGRPRHQGVMVGMGQKDSYV
GDEAQSKRGILTLYPIEHGIITNWDDMEKIWHHSFYNELRVAPEEHPTLLTEAPLNP
KANREKMTQIMFETFNVPAMYVAIQAVLSLYASGRTTGIVLDSDGVDGTHNVPIYEGY
ALPHAIMRLDLAGRDLTDYLMKILTERGYSFVTTAEREIVRDIKEKLCYVALDFENEM
ATAASSSSLEKSYELPDGQVITIGNERFRCPETLFQPSFIGMESAGIHETTYNSIMKC
DIDIRKDLYANNVLSGGTTMYPGIADRMQKEITALAPSTMKIKIIPPERKYSVWIGGS
ILASLSTFQQMWISKQEYDEAGPSIVHRKCF

3. Storage Buffer

Liquid Delivery Form: Tris/PBS-based buffer with 5%-50% glycerol. Custom glycerol content is available upon customer request (please specify requirements when placing orders).

Lyophilized Powder Delivery Form: Pre-lyophilization buffer is Tris/PBS-based buffer containing 6% Trehalose.

4. Storage Conditions

Upon receipt, store the product at -20°C or -80°C. It is recommended to aliquot the protein for multiple uses to avoid repeated freeze-thaw cycles, which may cause protein denaturation and activity loss.

5. Product Description

This product is a recombinant Human ACTA2 full length of mature protein protein (3-377aa) expressed in E.coli. The protein is with 10xHis tag at the N-terminus, which facilitates protein purification, detection and identification. ACTA2, also known as ACTSA or SMDYS or alpha-cardiac actin, is suitable for related in vitro functional assays, protein interaction studies, antibody preparation and other biomedical research applications.

6. Notes

- Repeated freezing and thawing of the product is strictly prohibited to ensure protein stability and biological activity.
- For special buffer component requirements, please submit a note when purchasing.
- This product is only for scientific research use, not for clinical diagnosis, treatment or commercial production purposes.