



Recombinant Human Actin, alpha 2, Smooth Muscle, Aorta Datasheet

Catalog Number: PR27190

Product Type: Recombinant Protein

Source: *E. Coli*

Amino Acid Sequence: MGSSHHHHHH SGLVPRGSH MGSHEEEDS TALVCDNGSG LCKAGFAGDD APRAVFPSPV GRPRHQGVMV GMGQKDSYVG DEAQSKRGIL TLKYPHIEGI ITNWDDMEKI WHHSFYNELR VAPEEHPTLL TEAPLNPKAN REKMTQIMFE TFNVPAMYVA IQAVLSLYAS GRTTGIVLDS GDGVTHNVPI YEGYALPHAI MRLDLAGRDL TDYLMKILTE RGYSFVTAE REIVRDIKEK LCYVALDFEN EMATAASSSS LEKSYELPDG QVITIGNERF RCPETLFQPS FIGMESAGIH ETTYNSIMKC DIDIRKDLYA NNVLSGGTTM YPGIADRMQK EITALAPSTM KIKIAPPER KYSVWIGGSI LASLSTFQQM WISKQEYDEA GPSIVHRKCF..

Description/Molecular Mass: ACTA2 is a member of the actin family of proteins, an extremely conserved family of proteins which takes part in cell motility, structure and integrity. Three types of actin isoforms are known: Alpha, beta and gamma. Alpha actins are a main factor of the contractile mechanism, and beta and gamma take part in the regulation of cell motility. ACTA2 is an alpha actin which is located in skeletal muscle. Mutations in ACTA2 cause aortic aneurysm familial thoracic type 6. Various alternatively spliced variants, encoding the same protein were identified.

ACTA2 Human Recombinant produced in *E. coli* is a single polypeptide chain containing 400 amino acids (3-377) and having a molecular mass of 44.4 kDa.

ACTA2 is fused to a 25 amino acid His-tag at N-terminus & purified by proprietary chromatographic techniques.

Purity: Greater than 85.0% as determined by:
(a) Analysis by SDS-PAGE.

Format: The ACTA2 solution contains 20mM Tris-HCl buffer (pH 8.0), 0.15M NaCl and 10% glycerol.

Storage: Store at 4°C if entire vial will be used within 2-4 weeks. Store, frozen at -20°C for longer periods of time. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Avoid multiple freeze-thaw cycles.

FOR RESEARCH USE ONLY

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