

Product datasheet for TP307486M

OriGene Technologies, Inc.

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Activin Receptor Type IA (ACVR1) (NM_001105) Human Recombinant Protein

Product data:

Product Type: Recombinant Proteins

Description: Recombinant protein of human activin A receptor, type I (ACVR1), transcript variant 1, 100 μg

Species: Human
Expression Host: HEK293T

Expression cDNA Clone >RC207486 representing NM_001105 or AA Sequence: Red=Cloning site Green=Tags(s)

MVDGVMILPVLIMIALPSPSMEDEKPKVNPKLYMCVCEGLSCGNEDHCEGQQCFSSLSINDGFHVYQKGC FQVYEQGKMTCKTPPSPGQAVECCQGDWCNRNITAQLPTKGKSFPGTQNFHLEVGLIILSVVFAVCLLAC LLGVALRKFKRRNQERLNPRDVEYGTIEGLITTNVGDSTLADLLDHSCTSGSGSGLPFLVQRTVARQITL LECVGKGRYGEVWRGSWQGENVAVKIFSSRDEKSWFRETELYNTVMLRHENILGFIASDMTSRHSSTQLW LITHYHEMGSLYDYLQLTTLDTVSCLRIVLSIASGLAHLHIEIFGTQGKPAIAHRDLKSKNILVKKNGQC CIADLGLAVMHSQSTNQLDVGNNPRVGTKRYMAPEVLDETIQVDCFDSYKRVDIWAFGLVLWEVARRMVS

NGIVEDYKPPFYDVVPNDPSFEDMRKVVCVDQQRPNIPNRWFSDPTLTSLAKLMKECWYQNPSARLTALR

IKKTLTKIDNSLDKLKTDC

TRTRPLEQKLISEEDLAANDILDYKDDDDK**V**

Tag: C-Myc/DDK

Predicted MW: 55 kDa

Concentration: $>0.05 \mu g/\mu L$ as determined by microplate BCA method

Purity: > 80% as determined by SDS-PAGE and Coomassie blue staining

Buffer: 25 mM Tris-HCl, 100 mM glycine, pH 7.3, 10% glycerol

Preparation: Recombinant protein was captured through anti-DDK affinity column followed by conventional

chromatography steps.

Note: For testing in cell culture applications, please filter before use. Note that you may experience

some loss of protein during the filtration process.

Storage: Store at -80°C.

Stability: Stable for 12 months from the date of receipt of the product under proper storage and

handling conditions. Avoid repeated freeze-thaw cycles.





RefSeq: NP 001096

Locus ID: 90

UniProt ID: <u>Q04771</u>, <u>D3DPA4</u>

RefSeq Size: 2952 Cytogenetics: 2q24.1 RefSeq ORF: 1527

Synonyms: ACTRI; ACVR1A; ACVRLK2; ALK2; FOP; SKR1; TSRI

Summary: Activins are dimeric growth and differentiation factors which belong to the transforming

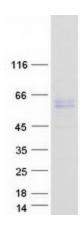
growth factor-beta (TGF-beta) superfamily of structurally related signaling proteins. Activins signal through a heteromeric complex of receptor serine kinases which include at least two type I (I and IB) and two type II (II and IIB) receptors. These receptors are all transmembrane proteins, composed of a ligand-binding extracellular domain with cysteine-rich region, a transmembrane domain, and a cytoplasmic domain with predicted serine/threonine specificity. Type I receptors are essential for signaling; and type II receptors are required for binding ligands and for expression of type I receptors. Type I and II receptors form a stable complex after ligand binding, resulting in phosphorylation of type I receptors by type II receptors. This gene encodes activin A type I receptor which signals a particular transcriptional response in concert with activin type II receptors. Mutations in this gene are associated with

fibrodysplasia ossificans progressive. [provided by RefSeq, Jul 2008]

Protein Families: Druggable Genome, ES Cell Differentiation/IPS, Protein Kinase, Transmembrane

Protein Pathways: Cytokine-cytokine receptor interaction, TGF-beta signaling pathway

Product images:



Coomassie blue staining of purified ACVR1 protein (Cat# [TP307486]). The protein was produced from HEK293T cells transfected with ACVR1 cDNA clone (Cat# [RC207486]) using MegaTran 2.0 (Cat# [TT210002]).