

## Product datasheet for PH307486

### Activin Receptor Type IA (ACVR1) (NM\_001105) Human Mass Spec Standard

#### Product data:

Product Type:	Mass Spec Standards
Description:	ACVR1 MS Standard C13 and N15-labeled recombinant protein (NP_001096)
Species:	Human
Expression Host:	HEK293
Expression cDNA Clone or AA Sequence:	RC207486
Predicted MW:	57.15 kDa
Protein Sequence:	>RC207486 representing NM_001105 Red=Cloning site Green=Tags(s)

MVDGVMILPVLIMIALPSPSMEDEKPKVNPPLYMCVCEGLSCGNEDHCEGQQCFSSLSINDGFHVYQKGC  
FQVYEQGKMTCKTPSPGQAVECCQGDWCNRNITAQLPTKGSFPGTQNFHLEVGLIILSVFVAVCLLAC  
LLGVALRKFKRRNQERLNPRDVEYGTIEGLITTNVGDSTLADLLDHSCTSGSGSGLPFLVQRTVARQITL  
LECVGKGRYGEVWRGSWQGENVAVKIFSSRDEKSWFRETLYNTVMLRHENILGFIASDMTSRHSSTQLW  
LITHYHEMGSLYDYQLTTLDTVSLRIVLSIASGLAHLHIEIFGTQGKPAIAHRDLKSKNILVKKNGQC  
CIADLGLAVMHSQSTNQLDVGNNPRVGTKRYMAPEVLDETIQVDCFDSYKRVDIWAFLVLEVARRMVS  
NGIVEDYKPPFYDVPNDPSFEDMRKVVCDQQRPNIPNRWFSPTLTLAKLMKECWYQNP SARLTALR  
IKKTLTKIDNSLDKLTDC

TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

Tag:	C-Myc/DDK
Purity:	> 80% as determined by SDS-PAGE and Coomassie blue staining
Concentration:	>0.05 µg/µL as determined by microplate BCA method
Labeling Method:	Labeled with [U- <sup>13</sup> C <sub>6</sub> , <sup>15</sup> N <sub>4</sub> ]-L-Arginine and [U- <sup>13</sup> C <sub>6</sub> , <sup>15</sup> N <sub>2</sub> ]-L-Lysine
Buffer:	25 mM Tris-HCl, 100 mM glycine, pH 7.3
Storage:	Store at -80°C. Avoid repeated freeze-thaw cycles.
Stability:	Stable for 3 months from receipt of products under proper storage and handling conditions.
RefSeq:	<u>NP_001096</u>
RefSeq Size:	2952
RefSeq ORF:	1527



[View online »](#)

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

**Locus ID:** 90

**UniProt ID:** [Q04771](#), [D3DPA4](#)

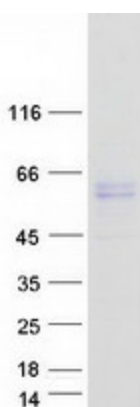
**Cytogenetics:** 2q24.1

**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]).