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# Product Information

## MemDX™ Membrane Protein Human ACVR1 (Activin A receptor type 1) for Antibody Discovery

Cat. No.: **MP1256J**
This product is for research use only and is not intended for diagnostic use.

This product is a 55 kDa Human ACVR1 membrane protein expressed in HEK293T. The protein is for research use only and is not approved for use in humans or in clinical diagnosis.

## Product Specifications

**Host Species**
Human

**Target Protein**
ACVR1

**Protein Length**
Full-length

**Protein Class**
Druggable Genome, ES Cell Differentiation/IPS, Protein Kinase, Transmembrane

**Molecular Weight**
55 kDa

**TMD**
1

**Sequence**
MVDGVMILPVLIMIALPSPSMEDEKPKVNPKLYMCVCEGLSCGNEDHCEGQQCFSSLSINDGFHVYQKGC
FQVYEQGKMTCKTPPSPGQAVECCQGDWCNRNITAQLPTKGKSFPGTQNFHLEVGLIILSVVFAVCLLAC
LLGVALRKFKRRNQERLNPRDVEYGTIEGLITTNVGDSTLADLLDHSCTSGSGSGLPFLVQRTVARQITL
LECVGKGRYGEVWRGSWQGENVAVKIFSSRDEKSWFRETELYNTVMLRHENILGFIASDMTSRHSSTQLW
LITHYHEMGSLYDYLQLTTLDTVSCLRIVLSIASGLAHLHIEIFGTQGKPAIAHRDLKSKNILVKKNGQC
CIADLGLAVMHSQSTNQLDVGNNPRVGTKRYMAPEVLDETIQVDCFDSYKRVDIWAFGLVLWEVARRMVS
NGIVEDYKPPFYDVVPNDPSFEDMRKVVCVDQQRPNIPNRWFSDPTLTSLAKLMKECWYQNPSARLTALR
IKKTLTKIDNSLDKLKTDC

## Product Description

**Expression Systems**
HEK293T

**Tag**

C-Myc/DDK

**Form**

Liquid

**Purification**

Anti-DDK affinity column followed by conventional chromatography steps

**Purity**

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

**Buffer**

25 mM Tris.HCl, pH 7.3, 100 mM glycine, 10% glycerol

**Storage**

Store at +4°C for up to one week or several months at -80°C

## Target

**Target Protein**

ACVR1

**Full Name**

Activin A receptor type 1

**Introduction**

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.

**Alternative Names**

FOP; ALK2; SKR1; TSRI; ACTRI; ACVR1A; ACVRLK2; TGF-B superfamily receptor type I; activin A receptor, type I; activin A receptor, type II-like kinase 2; activin receptor type I; hydroxyalkyl-protein kinase; serine/threonine-protein kinase receptor R1

**Gene ID**

90

**UniProt ID**

Q04771