

Recombinant Human Activin A Receptor, Type I

Cat. No. ACVR1-1583H **Lot. No.** (See product label)

SPECIFICATION

Product Overview

Species Human

Source Mammalian Cells

Description

The Activin type I receptors transduce signals for a variety of members of the Transforming growth factor beta superfamily of ligands. This family of cytokines and hormones include activin, Anti-müllerian hormone (AMH), bone morphogenetic proteins (BMPs), and Nodal. They are involved in a host of physiological processes including, growth, cell differentiation, homeostasis, osteogenesis, apoptosis and many other functions. There are three type I Activin receptors: ACVR1, ACVR1B, and ACVR1C. Activin isoforms and other members of the TGF- β superfamily exert their biological effects by binding to heteromeric complexes of a type I and a type II serine-threonine kinase receptor, both of which are essential for signal transduction. To date, seven type I and five type II receptors, including the two type I and the two type II activin receptors, designated ActR-I(A), ActR-IB, ActR-II(A) and ActR-IIB, have been cloned from mammals.

State Of Matter Lyophilized.

Purity >95% by SDS Page and analyzed by silver stain.

Endotoxin <1.0 EU/g as determined by the LAL method.

 Tel: 1-631-559-9269 1-516-512-3133

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

Molecular Weight The predicted molecular weight of Recombinant Human Activin RIA is Mr 39 kDa. However, the actual molecular weight as observed by migration on SDS Page is Mr 40-45 kDa.

Storage And Stability This lyophilized protein is stable for six to twelve months when stored desiccated at -20°C to -70°C. After aseptic reconstitution, this protein may be stored at 2°C to 8°C for one month or at -20°C to -70°C in a manual defrost freezer. Avoid Repeated Freeze Thaw Cycles.

GENE INFORMATION

Gene Name [ACVR1 activin A receptor, type I \[Homo sapiens \]](#)

Synonyms ACVR1; activin A receptor, type I; FOP; ALK2; SKR1; TSRI; ACTRI; ACVR1A; ACVRLK2; OTTHUMP00000204604; OTT HUMP000002 04626; hydroxyalkyl-protein kinase; TGF-B superfamily receptor type I; activin A receptor, type II-like kinase 2; serine/threonine-protein kinase receptor R1; EC 2.7.11.30

Gene ID [90](#)

mRNA Refseq [NM_001105](#)

Protein Refseq [NP_001096](#)

MIM [102576](#)

UniProt ID [Q04771](#)

Chromosome Location 2q23-q24

 Tel: 1-631-559-9269 1-516-512-3133

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

Pathway	Cytokine-cytokine receptor interaction; TGF-beta signaling pathway
Function	ATP binding; SMAD binding; activin binding; activin receptor activity, type I; follistatin binding; gnesium ion binding; manganese ion binding; nucleotide binding; protein homodimerization activity; receptor activity; transferase activity; transforming growth factor beta binding

 Tel: 1-631-559-9269 1-516-512-3133

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA