

Recombinant human Activin RIA/ALK-2 protein

Catalog Number: ATGP3898

PRODUCT INFORMATION

Expression system

Baculovirus

Domain

21-123aa

UniProt No.

Q04771

NCBI Accession No.

NP_001096

Alternative Names

ACVR1, ACTRI, ACVR1A, ACVRLK2, ALK2, FOP, SKR1, TSRI, Activin receptor type I, Activin receptor-like kinase 2, ACTR-I, ALK-2, TSR-I, Serine/threonine-protein kinase receptor R1, TGF-B superfamily receptor type I

PRODUCT SPECIFICATION

Molecular Weight

38.4 kDa (342aa)

Concentration

0.25mg/ml (determined by absorbance at 280nm)

Formulation

Liquid in. Phosphate-Buffered Saline (pH 7.4) containing 10% glycerol

Purity

> 90% by SDS-PAGE

Endotoxin level

< 1 EU per 1ug of protein (determined by LAL method)

Tag

hIgG-His-Tag

Application

SDS-PAGE

Storage Condition

Can be stored at +2C to +8C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.

BACKGROUND

Description

Activin RIA, also known as Activin receptor type-1, is a member of TGF-beta serine/threonine kinase receptor family. It forms a receptor complex consisting of two type II and two type I transmembrane serine/threonine kinases. Type II receptors phosphorylate and activate type I receptors which autophosphorylate, then bind and

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activate SMAD transcriptional regulators. This protein is involved for left-right pattern formation during embryogenesis. Also, it is important in the bone morphogenic protein (BMP) pathway which is responsible for the development and repair of the skeletal system. It has been connected to Fibrodysplasia Ossificans Progressiva, a disease characterized by the formation of heterotopic bone throughout the body. Recombinant Human Activin RIA, fused to hlgG-His-tag at C-terminus, was expressed in insect cell and purified by using conventional chromatography techniques.

Amino acid Sequence

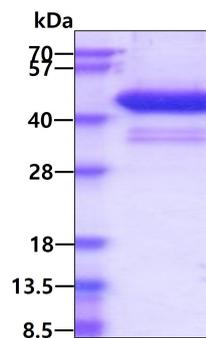
MEDEKPKVNP KLYMCVCEGL SCGNEDHCEG QQCFSSLSIN DGFHVYQKGC FQVYEQGKMT CKTPPSPGQA
VECCQGDWCN RNITAQLPTK GKSFPQTQNF HLE<LEPKSCD KTHTCP PCA PELLGGPSVF LFPPKPKDTL MISRTPEVTC
VVVDVSHEDP EVKFNWYVDG VEVHNAKTKP REEQYNSTYR VSVLTVLHQ DWLNGKEYKC KVS NKALPAP IEKTISKAKG
QPREPQVYTL PPSRDELTKN QVSLTCLVKG FYPSDIAVEW ESNGQPENNY KTT PPVLDSD GSFFLYSKLT VDKSRWQQGN
VFSCSVMHEA LHNHYTQKSL SLSPGKHHHH HH>

General References

Sorkin M., et al. (2017) Wound Repair Regen. 25:521-525.
Schoenmaker T., et al. (2019) J Cell Physiol. 234:10238-10247.

DATA

SDS-PAGE



3ug by SDS-PAGE under reducing condition and visualized by coomassie blue stain.