abcam

Product datasheet

Recombinant human Activin Receptor Type IA (deleted P197, mutated F198L) protein ab204142

2 Images

Description

Product name	Recombinant human Activin Receptor Type IA (deleted P197, mutated F198L) protein
Biological activity	The specific activity of ab204142 was determined to be 3.6 nmol /min/mg as per activity assay protocol.
Purity	> 90 % SDS-PAGE. Assessed by densitometry. Affinity purified.
Expression system	Baculovirus infected Sf9 cells
Accession	Q04771
Protein length	Protein fragment
Animal free	No
Nature	Recombinant
Species	Human
Predicted molecular weight	69 kDa including tags
Amino acids	147 to 509
Modifications	deleted P197, mutated F198L
Tags	GST tag N-Terminus

Specifications

Our **Abpromise guarantee** covers the use of **ab204142** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Applications	SDS-PAGE Functional Studies
Form	Liquid

Preparation and Storage

Stability and Storage	Shipped on Dry Ice. Upon delivery aliquot. Store at -80°C. Avoid freeze / thaw cycle. pH: 7.50 Constituents: 0.79% Tris HCl, 0.87% Sodium chloride, 0.31% Glutathione, 0.003% EDTA,

0.004% DTT, 0.002% PMSF, 25% Glycerol (glycerin, glycerine)

This product is an active protein and may elicit a biological response in vivo, handle with caution.

General Info

Function

On ligand binding, 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 activate SMAD transcriptional regulators. Receptor for activin. May be involved for left-right pattern formation during embryogenesis.

Tissue specificity

Expressed in normal parenchymal cells, endothelial cells, fibroblasts and tumor-derived epithelial cells.

Involvement in disease

Defects in ACVR1 are a cause of fibrodysplasia ossificans progressiva (FOP) [MIM:135100]. FOP is a rare autosomal dominant disorder of skeletal malformations and progressive extraskeletal ossification. Heterotopic ossification in FOP begins in childhood and can be induced by trauma or may occur without warning. Bone formation is episodic and progressive, leading to extra-articular ankylosis of all major joints of the axial and appendicular skeleton, rendering movement impossible.

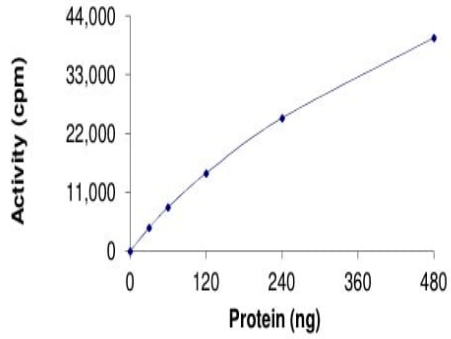
Sequence similarities

Belongs to the protein kinase superfamily. TKL Ser/Thr protein kinase family. TGFB receptor subfamily.
Contains 1 GS domain.
Contains 1 protein kinase domain.

Cellular localization

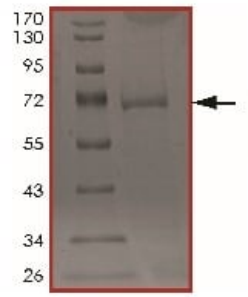
Membrane.

Images



Functional Studies - Recombinant human Activin Receptor Type IA (deleted P197, mutated F198L) protein (ab204142)

The specific activity of ab204142 was determined to be 3.6 nmol /min/mg as per activity assay protocol.



SDS-PAGE - Recombinant human Activin Receptor Type IA (deleted P197, mutated F198L) protein (ab204142)

SDS-PAGE showing ab204142.

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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