

Product datasheet

Recombinant human BMPR1A protein ab105907

5 Images

Description

Product name	Recombinant human BMPR1A protein
Biological activity	The Specific activity of ab105907 was determined to be 1.2 nmol/min/mg.
Purity	> 90 % Densitometry. Purity was determined to be >90% by densitometry.
Expression system	Baculovirus infected Sf9 cells
Accession	P36894
Protein length	Protein fragment
Animal free	No
Nature	Recombinant
Species	Human
Predicted molecular weight	66 kDa including tags
Amino acids	187 to 532

Specifications

Our [Abpromise guarantee](#) covers the use of **ab105907** in the following tested applications.

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

Applications	Western blot Functional Studies
Form	Liquid
Additional notes	ab204884 (Smad3 peptide) can be utilized as a substrate for assessing kinase activity

Preparation and Storage

Stability and Storage	Shipped on dry ice. Upon delivery aliquot and store at -80°C. Avoid freeze / thaw cycles. pH: 7.50 Constituents: 0.307% Glutathione, 0.00174% PMSF, 0.00385% DTT, 0.79% Tris HCl, 0.00292% EDTA, 25% Glycerol, 0.87% Sodium chloride This product is an active protein and may elicit a biological response in vivo, handle with caution.
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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 BMP2, BMP4, GDF5 and GDF6. Positively regulates chondrocyte differentiation through GDF5 interaction. Mediates induction of adipogenesis by GDF6.

Tissue specificity

Highly expressed in skeletal muscle.

Involvement in disease

Juvenile polyposis syndrome

Polyposis syndrome, mixed hereditary 2

A microdeletion of chromosome 10q23 involving BMPR1A and PTEN is a cause of chromosome 10q23 deletion syndrome, which shows overlapping features of the following three disorders: Bannayan-Zonana syndrome, Cowden disease and juvenile polyposis syndrome.

Sequence similarities

Belongs to the protein kinase superfamily. TKL Ser/Thr protein kinase family. TGFB receptor subfamily.

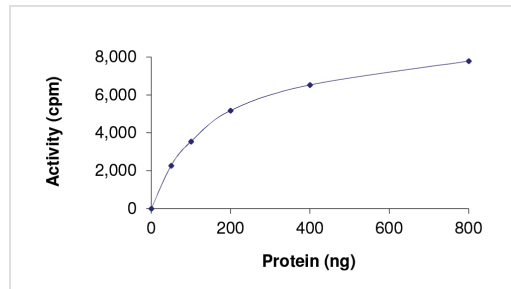
Contains 1 GS domain.

Contains 1 protein kinase domain.

Cellular localization

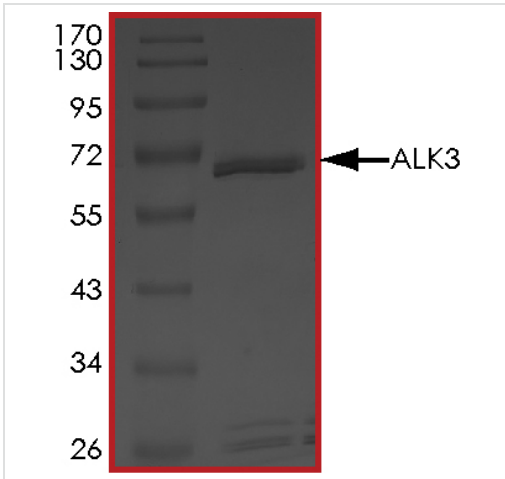
Membrane.

Images



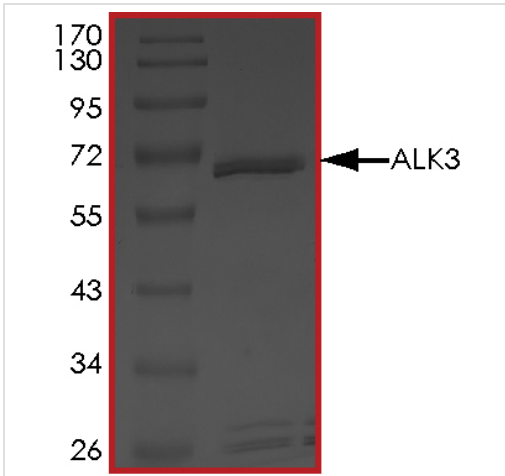
The specific activity of BMPR1A (ab105907) was determined to be 1.4 nmol/min/mg as per activity assay protocol

Functional Studies - Recombinant human BMPR1A protein (ab105907)



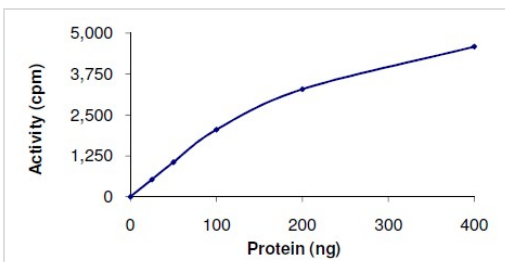
SDS PAGE analysis of ab105907

SDS-PAGE - Recombinant human BMPR1A protein (ab105907)



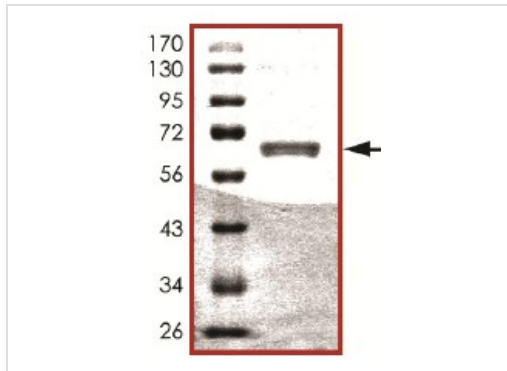
SDS PAGE analysis of ab105907

SDS-PAGE - Recombinant human BMPR1A protein (ab105907)



Kinase Assay demonstrating specific activity of ab105907 at 1.2 nmol/min/mg.

Functional Studies - Recombinant human BMPR1A protein (ab105907)



SDS-PAGE showing ab105907 at approximately 66kDa.

SDS-PAGE - Recombinant human BMPRI1A protein
(ab105907)

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