abcam

Product datasheet

Recombinant human TGF beta Receptor I protein ab105908

5 图像

描述

产品名称 重组人TGF beta Receptor I蛋白

生物活性 The Specific activity of ab105908 was determined to be 3 nmol/min/mg.

纯**度** > 90 % Densitometry.

Purity was determined to be >90% by densitometry. Affinity purified.

表达系统 Baculovirus infected Sf9 cells

Accession <u>P36897</u>

蛋白长度 Protein fragment

无动物成分 No

性质 Recombinant

种属 Human

预测分子量 66 kDa including tags

氨基酸 80 to 503

标签 GST tag N-Terminus

技术指标

Our **Abpromise guarantee** covers the use of **ab105908** in the following tested applications.

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

应用 Functional Studies

Western blot

形式 Liquid

补充说明 <u>ab204884</u> (Smad3 peptide) can be utilized as a substrate for assessing kinase activity

制备和贮存

稳定性和存储 Shipped on dry ice. Upon delivery aliquot and store at -80℃. Avoid freeze / thaw cycles.

pH: 7.50

Constituents: 0.307% Glutathione, 0.00174% PMSF, 0.00385% DTT, 0.79% Tris HCI, 0.00292%

EDTA, 25% Glycerol (glycerin, glycerine), 0.87% Sodium chloride

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

1

常规信息

功能

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 TGF-beta.

组织**特异性**

Found in all tissues examined, most abundant in placenta and least abundant in brain and heart.

疾病相关

Defects in TGFBR1 are the cause of Loeys-Dietz syndrome type 1A (LDS1A) [MIM:609192]; also known as Furlong syndrome or Loeys-Dietz aortic aneurysm syndrome (LDAS). LDS1 is an aortic aneurysm syndrome with widespread systemic involvement. The disorder is characterized by arterial tortuosity and aneurysms, craniosynostosis, hypertelorism, and bifid uvula or cleft palate. Other findings include exotropy, micrognathia and retrognathia, structural brain abnormalities, intellectual deficit, congenital heart disease, translucent skin, joint hyperlaxity and aneurysm with dissection throughout the arterial tree.

Defects in TGFBR1 are the cause of Loeys-Dietz syndrome type 2A (LDS2A) [MIM:608967]. LDS2 is an aortic aneurysm syndrome with widespread systemic involvement. Physical findings include prominent joint laxity, easy bruising, wide and atrophic scars, velvety and translucent skin with easily visible veins, spontaneous rupture of the spleen or bowel, diffuse arterial aneurysms and dissections, and catastrophic complications of pregnancy, including rupture of the gravid uterus and the arteries, either during pregnancy or in the immediate postpartum period. LDS2 is characterized by the absence of craniofacial abnormalities with the exception of bifid uvula that can be present in some patients.

Defects in TGFBR1 are the cause of aortic aneurysm familial thoracic type 5 (AAT5) [MIM:608967]. Aneurysms and dissections of the aorta usually result from degenerative changes in the aortic wall. Thoracic aortic aneurysms and dissections are primarily associated with a characteristic histologic appearance known as 'medial necrosis' in which there is degeneration and fragmentation of elastic fibers, loss of smooth muscle cells, and an accumulation of basophilic ground substance.

序列相似性

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

Contains 1 GS domain.

Contains 1 protein kinase domain.

翻译后修饰

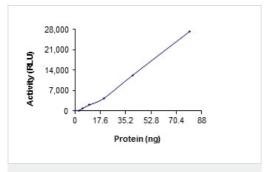
Phosphorylated at basal levels in the absence of ligand binding. Activated by multiple

phosphorylation, mainly in the GS region.

细胞定位

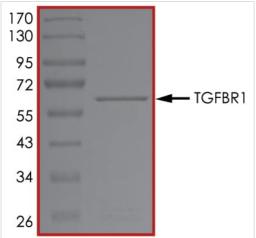
Membrane.

图片



Functional Studies - Recombinant human TGF beta Receptor I protein (ab105908)

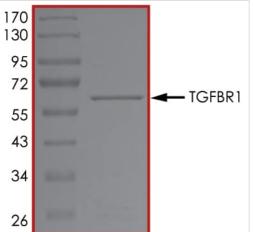
The specific activity of TGF beta Receptor I (ab105908) was determined to be 25 nmol/min/mg as per activity assay protocol and was equivalent to 2.5 nmol/min/mg as per radiometric assay



SDS-PAGE - Recombinant human TGF beta Receptor I protein (ab105908)

170 130 95

26

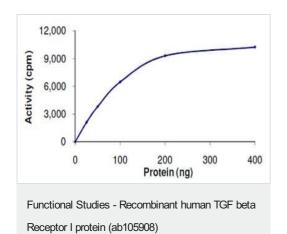


72 TGFBR1 55 43 34

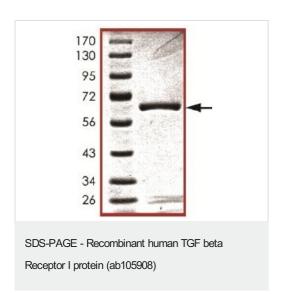
SDS-PAGE - Recombinant human TGF beta Receptor I protein (ab105908)

SDS PAGE analysis of ab105908

SDS PAGE analysis of ab105908



Kinase Assay demonstrating specific activity of ab105908 at 3 nmol/min/mg.



SDS-PAGE showing ab105908 at approximately 66kDa.

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

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		5