

## Datasheet for ABIN6699525

# ACVR1C/ALK7 Protein (GST tag)



#### Overview

Quantity:	20 μg
Target:	ACVR1C/ALK7 (ACVR1C)
Origin:	Human
Source:	Insect cells (Sf9)
Protein Type:	Recombinant
Purification tag / Conjugate:	This ACVR1C/ALK7 protein is labelled with GST tag.
Application:	Western Blotting (WB)

### **Product Details**

Purpose:	ALK7 recombinant protein-GST fusion protein
Purification:	Recombinant human ALK7 (135-end) was expressed by baculovirus in Sf9 insect cells using an N-terminal Glutathione-S-Transferase fusion protein. The purity was determined to be >75% by densitometry.
Purity:	>75%

## **Target Details**

Target:	ACVR1C/ALK7 (ACVR1C)
Alternative Name:	ACVR1C (ACVR1C Products)
Background:	Synonyms: ACVR1C, ACVRLK7, Activin receptor type-1C, Activin receptor type IC, ACTR-IC, ALK-7
	Background: ALK7 is a type I receptor for the TGFB family of signaling molecules in which type I

receptors phosphorylate cytoplasmic SMAD transcription factors, which then translocate to the nucleus and interact directly with DNA or in complex with other transcription factors (1). Alk7 was expressed in all insulin, glucagon, and somatostatin -positive cells of the pancreas (2). GDF3 regulates adipose tissue homeostasis and energy balance under nutrient overload, in part, by signaling through ALK7 and Alk7 showed reduced fat accumulation and partial resistance to diet-induced obesity, similar to Gdf3. ALK7 Protein is ideal for investigators involved in Signaling Proteins, Cellular Proteins, AKT/PKB Pathway, Angiogenesis, Cancer, Cardiovascular Disease, JAK/STAT Pathway, Neurobiology, and Ser/Thr Kinase research.

Pathways:

Negative Regulation of Hormone Secretion, Positive Regulation of Endopeptidase Activity

#### **Application Details**

Application Notes:

Western\_Blot\_Dilution: User Optimized

Application\_Note: ALK7 Protein is suitable for use in Western Blot. Expect a band approximately  $\sim$  68 kDa on specific lysates or tissues. Specific conditions for reactivity should be optimized by the end user.

Restrictions:

For Research Use only

#### Handling

Format:	Liquid
Concentration:	0.05 μg/μL
Buffer:	ALK7 Protein is stored in 50 mM Tris-HCl, pH 7.5, 150 mM NaCl, 10 mM glutathione, 0.1 mM EDTA, 0.25 mM DTT, 0.1 mM PMSF, 25 % glycerol.
Storage:	-80 °C
Storage Comment:	Store product at -70°C. For optimal storage, aliquot target into smaller quantities after centrifugation and store at recommended temperature. For most favorable performance, avoid repeated handling and multiple freeze/thaw cycles.
Expiry Date:	12 months