

Catalog # Aliquot Size

A08-35G-20 20 μg A08-35G-50 50 μg

ALK7 Protein

Recombinant human protein expressed in \$f9 cells

Catalog # A08-35G

Lot # L2076-9

Product Description

Recombinant human ALK7 (135-end) was expressed by baculovirus in Sf9 insect cells using an N-terminal GST tag. The ALK7 gene accession number is <u>BC022530</u>.

Gene Aliases

ACVR1C, ACVRLK7

Formulation

Recombinant protein stored in 50mM Tris-HCl, pH 7.5, 150mM NaCl, 10mM glutathione, 0.1mM EDTA, 0.25mM DTT, 0.1mM PMSF, 25% glycerol.

Storage and Stability

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.

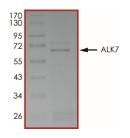
Scientific Background

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.

References

- Bondestam, J. et.al: cDNA cloning, expression studies and chromosome mapping of human type I serine/threonine kinase receptor ALK7 (ACVR1C). Cytogenet. Cell Genet. 95: 157-162, 2001.
- 2. Bertolino, P.et.al: Activin B receptor ALK7 is a negative regulator of pancreatic beta-cell function. Proc. Nat. Acad. Sci. 105: 7246-7251, 2008.

Purity



The purity of ALK7 was determined to be **>80%** by densitometry, approx. MW **68kDa**.

ALK7 Protein

Recombinant human protein expressed in Sf9 cells

Catalog #
Lot #
Purity
Concentration
Stability
Storage & Shipping

A08-35G L2076-9 >80% 0.05 µg/µl 1yr at -70°C from date of shipment

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. Product shipped on dry ice.

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