

Product Information

ALK7, GST-tagged, human recombinant, expressed in *Sf9* cells

Catalog Number **SRP5360**
Storage Temperature -70°C

Synonyms: ACVR1C, ACVRLK7

Product Description

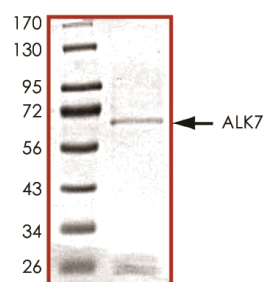
ALK7 is a type I receptor for the TGFB family of signaling molecules in which type I receptors phosphorylate cytoplasmic SMAD transcription factors, which then translocate to the nucleus and interact directly with DNA or in complex with other transcription factors.¹ Alk7 was expressed in all insulin, 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.

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 BC022530. It is supplied 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, and 25% glycerol.

Molecular mass: ~68 kDa

The enzymatic activity of this product has not been determined.

Figure 1.
SDS-PAGE Gel of Typical Lot:
 $\geq 70\%$ (SDS-PAGE, densitometry)



Precautions and Disclaimer

This product is for R&D use only, not for drug, household, or other uses. Please consult the Material Safety Data Sheet for information regarding hazards and safe handling practices.

Storage/Stability

The product ships on dry ice and storage at -70°C is recommended. After opening, aliquot into smaller quantities and store at -70°C . Avoid repeated handling and multiple freeze/thaw cycles.

References

1. 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).

RC,MAM, 10/12-1

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