Recombinant AVR2A protein (His tag)

Catalog Number	537643
Synonyms	Activin receptor type IIA; ACTR-IIA; ACTRIIA
Species	Human
Expression System	E. coli
Accession	P27037
Molecular Weight	Predictes a molecular mass of 15.06 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 16 kDa band.

Product Information

Sequence Region	20-135
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>87%, by SDS-PAGE with Coomassie Brilliant Blue staining.
Endotoxin	Not tested.
Activity	Not tested.
Stability	Samples are stable for up to twelve months from date of receipt at -70℃
Protein Construction	DNA encoding 20-135 aa (P27037) were fused with 6His tag.

Storage & Handling

Reconstitution	Reconstitute at 0.25 μg/μl in sterile water for short-term storage. Reconstitution with 50% glycerol solution is recommended for longer term storage (see Stability and Storage for more details). If a different concentration is needed for your purposes please adjust the reconstitution volume as required (please note: the ion concentration of the final solution will vary according to the volume used). Note: Centrifuge vial before opening. When reconstituting, gently pipet and wash down the sides of the vial to ensure full recovery of the protein into solution.
Storage	Store it under sterile conditions at -20℃ to -80℃. It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles.
Shipping	In general, recombinant proteins are provided as lyophilized powder which are shipped at ambient temperature. Bulk packages of recombinant proteins are provided as frozen liquid. They are shipped out with blue ice unless customers require otherwise.

Description

Description	Recombinant Human Activin Receptor Type-2A (ACVR2A) Fragment (aa 20-135) – a highly stable and soluble protein fragment engineered for structural and biochemical studies. This product enables researchers to investigate the molecular mechanisms of activin signaling and receptor function with a reliable, purified reagent. Activin Receptor Type-2A (ACVR2A) is a transmembrane serine/threonine kinase that, upon ligand binding, forms a receptor complex with type I receptors to initiate intracellular signaling. It specifically binds activin A, activin B, and inhibin A, leading to phosphorylation and activation of type I receptors, which subsequently activate SMAD transcriptional regulators. This receptor also mediates adipogenesis induction by GDF6. ACVR2A is localized to the cell membrane as a single-pass type I membrane protein, playing a critical role in developmental and cellular processes. The provided fragment (amino acids 20-135) was selected computationally for its stability and solubility, making it ideal for elucidating structural and functional aspects of the receptor.