Recombinant FNDC4 protein (His tag)

Catalog Number	549096
Synonyms	Fibronectin type III repeat-containing protein 1; sFNDC4
Species	Human
Expression System	E. coli
Accession	Q9H6D8
Molecular Weight	Predictes a molecular mass of 14.96 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 15 kDa band.

Product Information

Sequence Region	45-167
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>89%, 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 45-167 aa (Q9H6D8) 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 Fibronectin Type III Domain-Containing Protein 4 (FNDC4) Fragment (aa 45-167) – a high-purity protein fragment encompassing the complete Fibronectin type-III domain. This product is an essential tool for investigating the anti-inflammatory and metabolic regulatory functions of soluble FNDC4, enabling targeted domain-specific research in immunology and metabolic disease studies. Fibronectin Type III Domain-Containing Protein 4 (FNDC4) is a human protein that exists in two forms: a full-length membrane-bound version and a cleaved soluble form (sFNDC4). The soluble FNDC4 exhibits significant anti-inflammatory properties, particularly in the colon where it modulates macrophage activity to reduce inflammation. It also plays a role in bone metabolism by suppressing osteoclast formation and function, and in adipose tissue where it decreases local inflammation through interaction with GPR116 receptor. Additionally, FNDC4 contributes to systemic glucose regulation by enhancing insulin sensitivity in white adipocytes and promoting glucose uptake, mediated through ADGRF5/GPR116 receptor activation and cAMP signaling pathways. The full-length protein is membrane-anchored while the soluble cleaved form is secreted, making it accessible for extracellular signaling studies.