Recombinant DDR2 protein (His tag)

Catalog Number	542767
Synonyms	Discoidin domain receptor 2; CD167 antigen-like family member B; Discoidin domain-containing receptor tyrosine kinase 2; Neurotrophic tyrosine kinase, receptor-related 3; Receptor protein-tyrosine kinase TKT; Tyrosine-protein kinase TYRO10; CD antigen CD167b
Species	Human
Expression System	E. coli
Accession	Q16832
Molecular Weight	Predictes a molecular mass of 40.88 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 42 kDa band.

Product Information

Sequence Region	22-367
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 22-367 aa (Q16832) 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	This product is a high-quality recombinant protein fragment of human Discoidin domain-containing receptor 2 (DDR2), spanning amino acids 22-367. It includes the complete F5/8 type C domain and is an essential tool for investigating collagen signaling, extracellular matrix remodeling, and cell migration in various research applications. Discoidin domain-containing receptor 2 (DDR2) is a tyrosine kinase receptor located on the cell membrane, functioning as a key receptor for fibrillar collagen. It plays a critical role in tissue remodeling by regulating cell differentiation, proliferation, and migration. DDR2 is involved in osteoblast differentiation and chondrocyte maturation through MAP kinase pathways, activating the transcription factor RUNX2 to support normal bone development. Additionally, it upregulates collagenases such as MMP1, MMP2, and MMP13, facilitating extracellular matrix remodeling, which is vital for processes like wound healing and tumor cell invasion. Its subcellular localization as a single-pass type I membrane protein underscores its role in cell surface signaling and interaction with the extracellular environment.