



Recombinant Protein Technical Manual
Recombinant Human DDR2 Kinase/CD167b Protein
(aa 422-855, His & GST Tag)(Active)
RPES2011

Product Data:

Product SKU: RPES2011

Size: 20µg

Species: Human

Expression host: Baculovirus-Insect Cells

Uniprot: Q16832

Protein Information:

Molecular Mass: 77.1 kDa

AP Molecular Mass: 77 kDa

Tag: N-His & GST

Bio-activity: The specific activity was determined to be 8 nmol/min/mg using synthetic AXLtide peptide(CKKSRGDYMTMQIG) as substrate.

Purity: > 95 % as determined by reducing SDS-PAGE.

Endotoxin: < 1.0 EU per µg as determined by the LAL method.

Storage: Store at < -20°C, stable for 6 months. Please minimize freeze-thaw cycles.

Shipping: This product is provided as liquid. It is shipped at frozen temperature with blue ice/gel packs. Upon receipt, store it immediately at<-20°C.

Formulation: Supplied as sterile 20mM Tris, 500mM NaCl, pH 7.4, 10% glycerol

Reconstitution: Please refer to the printed manual for detailed information.

Application:

Synonyms: CD167;MIG20a;NTRKR3;TKT;TYRO10

Immunogen Information:

Sequence: Arg422-Glu855

Background:

Discoidin domain receptor 2 (DDR2) or CD167b (cluster of differentiation 167b) is a kind of protein tyrosine kinases associated with cell proliferation and tumor metastasis, and collagen, identified as a ligand for DDR2, up-regulates matrix metalloproteinase 1 (MMP) and MMP-2 expression in cellular matrix. DDR2/CD167b was found to recognise the triple-helical region of collagen X as well as the NC1 domain. Binding to the collagenous region was dependent on the triple-helical conformation. DDR2/CD167b autophosphorylation was induced by the collagen X triple-helical region but not the NC1 domain, indicating that the triple-helical region of collagen X contains a specific DDR2 binding site that is capable of receptor activation. DDR2/CD167b is induced during stellate cell activation and implicate the phosphorylated receptor as a mediator of MMP-2 release and growth stimulation in response to type I collagen. Moreover, type I collagen-dependent upregulation of DDR2/CD167b expression establishes a positive feedback loop in activated stellate cells, leading to further proliferation and enhanced invasive activity.