

## Recombinant Human DDR2 Kinase/CD167b Protein (aa 422-855, His & GST Tag)

Catalog No. PKSH030420

**Note:** Centrifuge before opening to ensure complete recovery of vial contents.

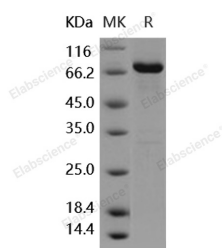
### Description

<b>Synonyms</b>	CD167;MIG20a;NTRKR3;TKT;TYRO10
<b>Species</b>	Human
<b>Expression Host</b>	Baculovirus-Insect Cells
<b>Sequence</b>	Arg422-Glu855
<b>Accession</b>	Q16832
<b>Calculated Molecular Weight</b>	77.1 kDa
<b>Observed molecular weight</b>	77 kDa
<b>Tag</b>	N-His-GST
<b>Bioactivity</b>	The specific activity was determined to be 8 nmol/min/mg using synthetic AXLtide peptide(CKKSRGDYMTMQIG) as substrate.

### Properties

<b>Purity</b>	> 95 % as determined by reducing SDS-PAGE.
<b>Endotoxin</b>	< 1.0 EU per µg of the protein as determined by the LAL method.
<b>Storage</b>	Store at < -20°C, stable for 6 months. Please minimize freeze-thaw cycles.
<b>Shipping</b>	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.
<b>Formulation</b>	Supplied as sterile solution of 20mM Tris, 500mM NaCl, pH 7.4, 10% glycerol
<b>Reconstitution</b>	Not Applicable

### Data



> 95 % as determined by reducing SDS-PAGE.

### 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-1) and MMP-2 expression in cellular matrix. DDR2/CD167b was found to recognise the

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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.