

# Rabbit Anti-CD167b/DDR2 antibody

SL4194R

Product Name:	CD167b/DDR2
Chinese Name:	盘状结构域受体蛋白2抗体
Alias:	<ul> <li>DDR 2; DDR2; ; DDR 2; CD167b antigen; Cell migration inducing protein 20;</li> <li>Discoidin domain containing receptor 2; Discoidin domain receptor 2; Discoidin domain receptor 2; Discoidin domain receptor 2; Discoidin domain receptor family member 2v Hydroxyaryl protein kinase; MIG20a; Migration inducing gene 16 protein; Neurotrophic tyrosine kinase; Neurotrophic tyrosine kinase receptor related 3v NTRKR 3; NTRKR3v Receptor protein tyrosine kinase TKTv Receptor related 3; TKTv TYRO 10; TYRO10; Tyrosine kinase receptor related to neurotrophic TRK; Tyrosine protein kinase TYRO 10; Tyrosine protein kinase TYRO10; Tyrosylprotein kinase; DDR2_HUMAN; Discoidin domain-containing 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; CD167b.</li> </ul>
文화리田	Specific References(2) SL4194R has been referenced in 2 publications. [IF=5.01]Wang, Li-Ping, et al. "Angiotensin II upregulates K Ca 3.1 channels and stimulates cell proliferation in rat cardiac fibroblasts." Biochemical pharmacology 85.10 (2013): 1486-1494.Rat.
	PubMed:23500546
Publ	<b>[IF=3.32]</b> Zhu, Xiao, Delbert G. Gillespie, and Edwin K. Jackson. "NPY1–36 and PYY1–36 activate cardiac fibroblasts: an effect enhanced by genetic hypertension and inhibition of dipeptidyl peptidase 4." American Journal of Physiology-Heart and Circulatory Physiology 309.9 (2015): H1528-H1542. <b>IF(ICC);Rat</b> .
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human, Mouse, Rat, Chicken, Dog, Pig, Cow, Horse, Rabbit,

Applications:	WB=1:500-2000ELISA=1:500-1000Flow-Cyt=1ug/test
	not yet tested in other applications.
	optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	92kDa
Cellular localization:	The cell membrane
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human CD167b:245-
	350/855 <extracellular></extracellular>
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized
C4aua mar	antibody is stable at room temperature for at least one month and for greater than a year
Storage:	when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of
	antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	PubMed
	Receptor tyrosine kinases (RTKs) play a key role in the communication of cells with
	their microenvironment. These molecules are involved in the regulation of cell growth,
	differentiation, and metabolism. In several cases the biochemical mechanism by which
	RTKs transduce signals across the membrane has been shown to be ligand induced
	receptor oligomerization and subsequent intracellular phosphorylation. This
	autophosphorylation leads to phosphorylation of cytosolic targets as well as association
	with other molecules, which are involved in pleiotropic effects of signal transduction.
	RTKs have a tripartite structure with extracellular, transmembrane, and cytoplasmic
	regions. This gene encodes a member of a novel subclass of RTKs and contains a
	distinct extracellular region encompassing a factor VIII-like domain. Alternative splicing
	in the 5 ° 0 I K results in multiple transcript variants encoding the same protein. [provided
	by Reised, Jul 2008].
	Function
Product Dotail.	Function.
i foduct Detail.	cell differentiation remodeling of the extracellular matrix cell migration and cell
	proliferation. Required for normal hone development. Regulates osteoblast
	differentiation and chondrocyte maturation via a signaling pathway that involves MAP
	kinases and leads to the activation of the transcription factor RUNX2 Regulates
	remodeling of the extracellular matrix by un-regulation of the collagenases MMP1
	MMP2 and MMP13, and thereby facilitates cell migration and tumor cell invasion.
	Promotes fibroblast migration and proliferation, and thereby contributes to cutaneous
	wound healing.
	Subunit:
	Binds hydroxyproline-rich sequence motifs in fibrillar. glycosylated collagen, such as
	the GQOGVMGFO motif, where O stands for hydroxyproline. Interacts with SRC.
	Interacts (tyrosine phosphorylated) with SHC1.

## Subcellular Location:

Cell membrane; Single-pass type I membrane protein.

### Tissue Specificity:

Detected in osteocytes, osteoblastic cells in subchondral bone, bone lining cells, tibia and cartilage. Detected at high levels in heart and lung, and at low levels in brain, placenta, liver, skeletal muscle, pancreas, and kidney.

#### Post-translational modifications:

N-glycosylated.

Tyrosine phosphorylated in response to collagen binding. Phosphorylated by SRC; this is required for activation and subsequent autophosphorylation on additional tyrosine residues.

#### **DISEASE:**

Defects in DDR2 are the cause of spondyloepimetaphyseal dysplasia short limb-hand type (SEMD-SL) [MIM:271665]. A bone disease characterized by short-limbed dwarfism, a narrow chest with pectus excavatum, brachydactyly in the hands and feet, a characteristic craniofacial appearance and premature calcifications. The radiological findings are distinctive and comprise short long bones throughout the skeleton with striking epiphyses that are stippled, flattened and fragmented and flared, irregular metaphyses. Platyspondyly in the spine with wide intervertebral spaces is observed and some vertebral bodies are pear-shaped with central humps, anterior protrusions and posterior scalloping.

Similarity:

Belongs to the protein kinase superfamily. Tyr protein kinase family. Insulin receptor subfamily.

Contains 1 F5/8 type C domain. Contains 1 protein kinase domain.

SWISS: Q16832

**Gene ID:** 4921

#### Database links:

Entrez Gene: 4921Human

Entrez Gene: 18214Mouse

Entrez Gene: 685781Rat

<u>Omim: 191311</u>Human

SwissProt: Q16832Human





