

**Mouse Ddr1 Blocking Peptide (Center)**  
**Synthetic peptide**  
**Catalog # BP20672c****Specification****Mouse Ddr1 Blocking Peptide (Center) - Product Information**

Primary Accession [Q03146](#)  
Other Accession [Q63474](#), [Q08345](#)

**Mouse Ddr1 Blocking Peptide (Center) - Additional Information**

**Gene ID** 12305

**Other Names**

Epithelial discoidin domain-containing receptor 1, Epithelial discoidin domain receptor 1, CD167 antigen-like family member A, Cell adhesion kinase, Discoidin receptor tyrosine kinase, Protein-tyrosine kinase MPK-6, Tyrosine kinase DDR, Tyrosine-protein kinase CAK, CD167a, Ddr1, Cak, Eddr1, Mpk6

**Target/Specificity**

The synthetic peptide sequence is selected from aa 396-410 of HUMAN Ddr1

**Format**

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

**Storage**

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

**Precautions**

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

**Mouse Ddr1 Blocking Peptide (Center) - Protein Information**

**Name** Ddr1

**Mouse Ddr1 Blocking Peptide (Center) - Background**

Tyrosine kinase that functions as cell surface receptor for fibrillar collagen and regulates cell attachment to the extracellular matrix, remodeling of the extracellular matrix, cell migration, differentiation, survival and cell proliferation. Collagen binding triggers a signaling pathway that involves SRC and leads to the activation of MAP kinases. Regulates remodeling of the extracellular matrix by up-regulation of the matrix metalloproteinases MMP2, MMP7 and MMP9, and thereby facilitates cell migration and wound healing, but also tumor cell invasion. Promotes smooth muscle cell migration, and thereby contributes to arterial wound healing. Phosphorylates PTPN11 (By similarity). Required for normal blastocyst implantation during pregnancy, for normal mammary gland differentiation and normal lactation. Required for normal ear morphology and normal hearing.

**Mouse Ddr1 Blocking Peptide (Center) - References**

Perez J.L.,et al.Oncogene 12:1469-1477(1996).  
Gilardi-Hebenstreit P.,et al.Oncogene 7:2499-2506(1992).  
Vogel W.F.,et al.Mol. Cell. Biol. 21:2906-2917(2001).  
Hou G.,et al.Circ. Res. 90:1147-1149(2002).  
Gross O.,et al.Kidney Int. 66:102-111(2004).

**Synonyms** Cak, Eddr1, Mpk6

**Function**

Tyrosine kinase that functions as cell surface receptor for fibrillar collagen and regulates cell attachment to the extracellular matrix, remodeling of the extracellular matrix, cell migration, differentiation, survival and cell proliferation. Collagen binding triggers a signaling pathway that involves SRC and leads to the activation of MAP kinases. Regulates remodeling of the extracellular matrix by up-regulation of the matrix metalloproteinases MMP2, MMP7 and MMP9, and thereby facilitates cell migration and wound healing, but also tumor cell invasion. Promotes smooth muscle cell migration, and thereby contributes to arterial wound healing. Phosphorylates PTPN11 (By similarity). Required for normal blastocyst implantation during pregnancy, for normal mammary gland differentiation and normal lactation. Required for normal ear morphology and normal hearing.

**Cellular Location**

Cell membrane; Single-pass type I membrane protein

**Tissue Location**

Detected in the cochlea and the organ of Corti in the inner ear. Isoform 1 is predominant and is expressed in developing embryo and adult brain. Isoform 2 is expressed in various epithelial cells.

**Mouse Ddr1 Blocking Peptide (Center) - Protocols**

Provided below are standard protocols that you may find useful for product applications.

- [Blocking Peptides](#)