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MCK10 Antibody Blocking Peptide
Synthetic peptide
Catalog # BP7660d

Specification

MCK10 Antibody Blocking Peptide - Product Information

Primary Accession Q08345

MCK10 Antibody Blocking Peptide - Additional Information

Gene ID 780

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, HGK2, Mammary carcinoma kinase 10, MCK-10, Protein-tyrosine kinase 3A, Protein-tyrosine kinase RTK-6, TRK E, Tyrosine kinase DDR, Tyrosine-protein kinase CAK, CD167a, DDR1, CAK, EDDR1, NEP, NTRK4, PTK3A, RTK6, TRKE

Target/Specificity
The synthetic peptide sequence used to generate the antibody <a >AP7660d was selected from the region of human MCK10. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

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.

MCK10 Antibody Blocking Peptide - Protein Information

Name DDR1

Synonyms CAK, EDDR1, NEP, NTRK4, PTK3A, RTK6, TRK

Function
Tyrosine kinase that functions as a 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. Required for normal blastocyst implantation during pregnancy, for normal mammary gland differentiation and normal lactation. Required for normal

ear morphology and normal hearing (By similarity). Promotes smooth muscle cell migration, and thereby contributes to arterial wound healing. Also plays a role in tumor cell invasion. Phosphorylates PTPN11.

Cellular Location
[Isoform 1]: Cell membrane; Single-pass type I membrane protein [Isoform 3]: Secreted.

Tissue Location
Detected in T-47D, MDA-MB-175 and HBL-100 breast carcinoma cells, A-431 epidermoid carcinoma cells, SW48 and SNU-C2B colon carcinoma cells and Hs 294T melanoma cells (at protein level) Expressed at low levels in most adult tissues and is highest in the brain, lung, placenta and kidney. Lower levels of expression are detected in melanocytes, heart, liver, skeletal muscle and pancreas Abundant in breast carcinoma cell lines. In the colonic mucosa, expressed in epithelia but not in the connective tissue of the lamina propria. In the thyroid gland, expressed in the epithelium of the thyroid follicles. In pancreas, expressed in the islets of Langerhans cells, but not in the surrounding epithelial cells of the exocrine pancreas. In kidney, expressed in the epithelia of the distal tubules Not expressed in connective tissue, endothelial cells, adipose tissue, muscle cells or cells of hematopoietic origin

MCK10 Antibody Blocking Peptide - Protocols

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

- Blocking Peptides

MCK10 Antibody Blocking Peptide - Images

MCK10 Antibody Blocking Peptide - Background

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. MCK10 is a RTK that is widely expressed in normal and transformed epithelial cells and is activated by various types of collagen. This protein belongs to a subfamily of tyrosine kinase receptors with a homology region to the Dictyostelium discoideum protein discoidin I in their extracellular domain. Its autophosphorylation is achieved by all collagens so far tested (type I to type VI). In situ studies and Northern-blot analysis showed that expression of this protein is restricted to epithelial cells, particularly in the kidney, lung, gastrointestinal tract, and brain. In addition, this protein is significantly over-expressed in several human tumors from breast, ovarian, esophageal, and pediatric brain.

MCK10 Antibody Blocking Peptide - References

Vogel, W., et al., Mol. Cell 1(1):13-23 (1997).Playford, M.P., et al., Genome Res. 6(7):620-627 (1996).Perez, J.L., et al., Oncogene 12(7):1469-1477 (1996).Valent, A., et al., Hum. Genet. 98(1):12-15 (1996).Edelhoff, S., et al., Genomics 25(1):309-311 (1995).