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DDR2 (TYRO10) Antibody Blocking peptide
Synthetic peptide
Catalog # BP7689a

Specification

DDR2 (TYRO10) Antibody Blocking peptide - Product Information

Primary Accession Q16832

DDR2 (TYRO10) Antibody Blocking peptide - Additional Information

Gene ID 4921

Other Names
Discoidin domain-containing receptor 2, Discoidin domain 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, Tyrosine-protein kinase TYRO10, CD167b, DDR2, NTRKR3, TKT, TYRO10

Target/Specificity
The synthetic peptide sequence used to generate the antibody AP7689a was selected from the region of human TYRO10. 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.

DDR2 (TYRO10) Antibody Blocking peptide - Protein Information

Name DDR2

Synonyms NTRKR3, TKT, TYRO10

Function
Tyrosine kinase involved in the regulation of tissues remodeling (PubMed:30449416). It functions as a cell surface receptor for fibrillar collagen and regulates cell differentiation, remodeling of the extracellular matrix, cell migration and cell proliferation. Required for normal bone 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 up- 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.

Cellular Location
Cell membrane; Single-pass type I membrane protein

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

DDR2 (TYRO10) Antibody Blocking peptide - Protocols

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

- Blocking Peptides

DDR2 (TYRO10) Antibody Blocking peptide - Images

DDR2 (TYRO10) 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. 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. There are several subclasses of RTKs and TYRO10 belongs to a novel subclass. The deduced amino acid sequence of TYRO10 has a unique extracellular region encompassing a factor VIII-like domain, not previously described for RTKs.

DDR2 (TYRO10) Antibody Blocking peptide - References

Vogel, W., et al., Mol. Cell 1(1):13-23 (1997).Edelhoff, S., et al., Genomics 25(1):309-311 (1995).Karn, T., et al., Oncogene 8(12):3433-3440 (1993).Abedinia, M., et al., Biochem. Biophys. Res. Commun. 183(3):1159-1166 (1992).Lapsys, N.M., et al., Cytogenet. Cell Genet. 61(4):274-275 (1992).