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TYRO10 Antibody
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP7689B

Specification

TYRO10 Antibody - Product Information

Application	**WB, IHC-P, FC,E**
Primary Accession	Q16832
Reactivity	**Human**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**

TYRO10 Antibody - 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
This TYRO10 antibody is generated from rabbits immunized with a his tag recombinant protein of human TYRO10.

Dilution
WB~~1:1000
IHC-P~~1:10~50
FC~~1:10~50

Format
Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.

Storage
Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions
TYRO10 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

TYRO10 Antibody - Protein Information

Name DDR2

Synonyms NTRKR3, TKT, TYRO10

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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

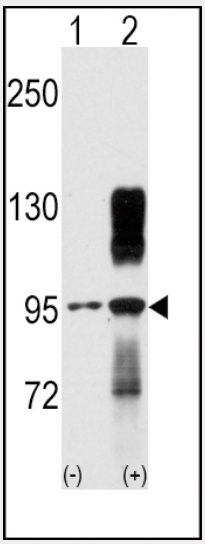
Tissue Location
Detected in osteocytes, osteoblastic cells in subchondral bone, bone lining cells, tibia and cartilage (at protein level). Detected at high levels in heart and lung, and at low levels in brain, placenta, liver, skeletal muscle, pancreas, and kidney

TYRO10 Antibody - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

TYRO10 Antibody - Images



Western blot analysis of TYRO10 (arrow) using rabbit polyclonal TYRO10 Antibody (Cat.#AP7689b). 293 cell lysates (2 ug/lane) either nontransfected (Lane 1) or transiently transfected with the DDR2 gene (Lane 2) (Origene Technologies).

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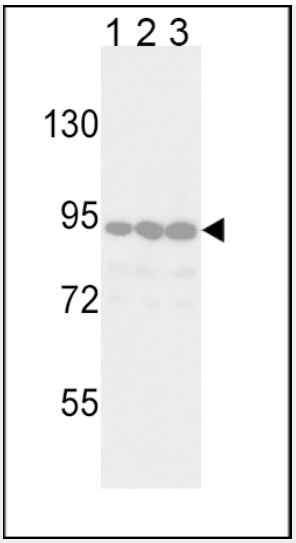
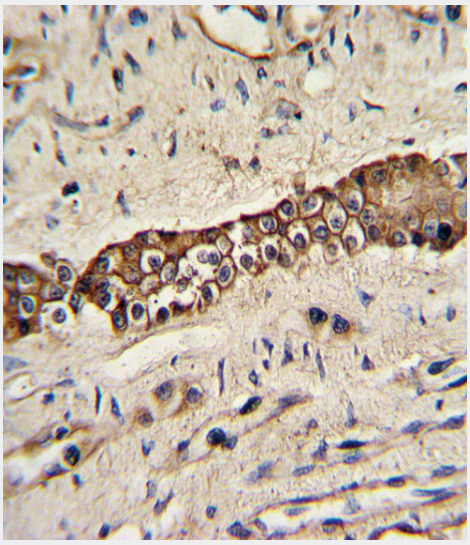


Western blot analysis of TYRO10 Antibody (Cat.#AP7689b) in Jurkat(lane 1), 293(lane 2) and Hela(lane 3) cell line lysates (35ug/lane). TYRO10 (arrow) was detected using the purified Pab.



Formalin-fixed and paraffin-embedded human normal lung with TYRO10 Antibody, which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.

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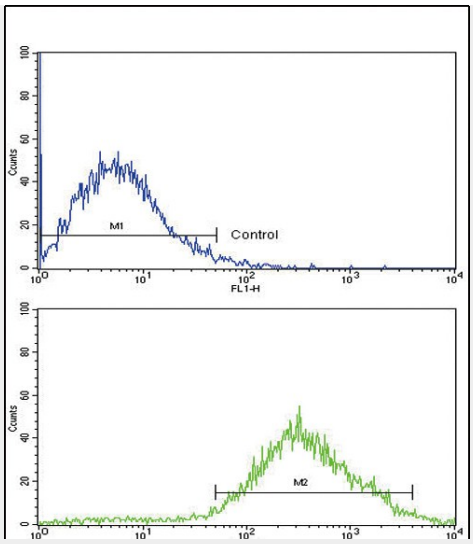

Flow cytometric analysis of jurkat cells using TYRO10 Antibody(bottom histogram) compared to a negative control (top histogram). FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

TYRO10 Antibody - 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.

TYRO10 Antibody - 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).