

TYRO3 Antibody Blocking Peptide
Synthetic peptide
Catalog # BP7679d**Specification**

TYRO3 Antibody Blocking Peptide - Product Information

Primary Accession [Q06418](#)
Other Accession [NP_006284](#)

TYRO3 Antibody Blocking Peptide - Additional Information

Gene ID 7301

Other Names

Tyrosine-protein kinase receptor TYRO3, Tyrosine-protein kinase BYK, Tyrosine-protein kinase DTK, Tyrosine-protein kinase RSE, Tyrosine-protein kinase SKY, Tyrosine-protein kinase TIF, TYRO3, BYK, DTK, RSE, SKY, TIF

Target/Specificity

The synthetic peptide sequence used to generate the antibody [BP7679d](#) was selected from the region of human TYRO3. 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.

TYRO3 Antibody Blocking Peptide - Protein Information

Name TYRO3

Synonyms BYK, DTK, RSE, SKY, TIF

Function

Receptor tyrosine kinase that transduces signals from the extracellular matrix into the cytoplasm by binding to several ligands including TULP1 or GAS6. Regulates many physiological processes including cell survival, migration and differentiation. Ligand binding at the cell surface induces dimerization and autophosphorylation of TYRO3 on its intracellular domain that provides docking sites for downstream signaling molecules. Following activation by ligand, interacts with PIK3R1 and thereby enhances PI3-kinase activity. Activates the AKT survival pathway, including nuclear translocation of NF-kappa-B and up-regulation of transcription of NF-kappa-B-regulated genes. TYRO3 signaling plays a role in various processes such as neuron protection from excitotoxic

injury, platelet aggregation and cytoskeleton reorganization. Also plays an important role in inhibition of Toll-like receptors (TLRs)-mediated innate immune response by activating STAT1, which selectively induces production of suppressors of cytokine signaling SOCS1 and SOCS3.

Cellular Location

Cell membrane; Single-pass type I membrane protein

Tissue Location

Abundant in the brain and lower levels in other tissues

TYRO3 Antibody Blocking Peptide - Protocols

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

- [Blocking Peptides](#)

TYRO3 Antibody Blocking Peptide - Images**TYRO3 Antibody Blocking Peptide - Background**

Tyrosine kinase 3, mainly expressed in brain, is involved in the protection of neurons from apoptosis. Protein kinases are enzymes that transfer a phosphate group from a phosphate donor, generally the γ phosphate of ATP, onto an acceptor amino acid in a substrate protein. By this basic mechanism, protein kinases mediate most of the signal transduction in eukaryotic cells, regulating cellular metabolism, transcription, cell cycle progression, cytoskeletal rearrangement and cell movement, apoptosis, and differentiation. With more than 500 gene products, the protein kinase family is one of the largest families of proteins in eukaryotes. The family has been classified in 8 major groups based on sequence comparison of their tyrosine (PTK) or serine/threonine (STK) kinase catalytic domains.

TYRO3 Antibody Blocking Peptide - References

Dey, B.R., et al., Gene 209 (1-2), 175-183 (1998).