10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

TYRO3 Antibody

Purified Mouse Monoclonal Antibody
Catalog # AO1274a

Product Information

Application	WB, E
Primary Accession	Q06418
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Clone Names	10E11
Isotype	IgG1
Calculated MW	96905
Description	TYRO3: Tyrosine-protein kinase, also known as BYK, Brt, Dtk, Sky. Entrez Protein: NP_006284. It belongs to the Tyr protein kinase family (AXL/UFO subfamily). The UFO family of receptor tyrosine kinases is comprised of subfamily members Rse(also referred to as Tyro3 or Sky) and UFO (also called Tyro7 or Axl). Two distinct isoforms of Rse, designated Brt and Etk-2, have been described. Brt differs from Rse at its C-terminus, but more importantly lacks the N-terminal 31 amino acid signal peptide sequence present in Rse, which is replaced by a 27 amino acid Brt-specific sequence. It has been suggested that as a result of this alternative splicing event, Brt resides in the cytoplasm, unlike Rse which is expressed on the cell surface. Ekt-2 also lacks an N-terminal signal peptide which is substituted with a 45 amino acid Ekt-2-specific sequence. 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.
Immunogen	Purified recombinant extracellular fragment of human TYRO3 fused with hIgGFc tag expressed in HEK293 cell line.
Formulation	Ascitic fluid containing 0.03% sodium azide.

Additional Information

Gene ID	7301
Other Names	Tyrosine-protein kinase receptor TYRO3, 2.7.10.1, 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
Dilution	WB~~1/500 - 1/2000 E~~N/A
Storage	Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions	TYRO3 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

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

References

1. Gene. 1993 Dec 8;134(2):289-93 2. J Biol Chem. 1996 Nov 22;271 3. Blood. 2000 Jan 15;95(2):633-8.

Images

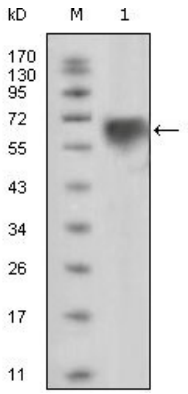
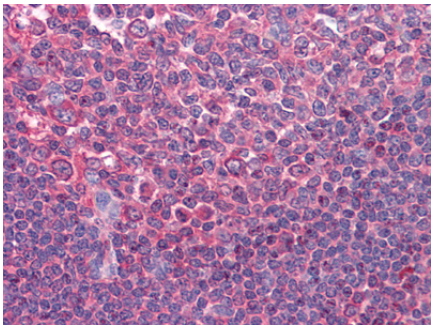


Figure 1: Western blot analysis using TYRO3 mouse mAb against extracellular domain of human TYRO3 (aa41-429).

Figure 1: Immunohistochemical analysis of paraffin-embedded human Tonsil tissues using anti-CD80 mAb



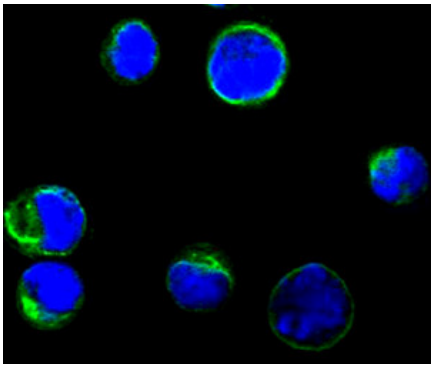


Figure 1: Confocal immunofluorescence analysis of BCBL-1 cells using anti-CD80 monoclonal antioby(green), showing membrane localization. Blue: DRAQ5 fluorescent DNA dye.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.