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Tyro3 Antibody

Purified Mouse Monoclonal Antibody
Catalog # AO1173a

Product Information

Application	ICC, E
Primary Accession	Q06418
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Clone Names	6D6F10
Isotype	IgG1
Calculated MW	96905
Description	Tyro3 (also known as Sky and Rse), with 890-amino acid protein (about 98kDa), belongs to the Axl/Tyro3 family of receptor tyrosine kinases, which also includes Axl and Mer.Gas6 (growth arrest-specific gene-6) is a ligand for all members of the Axl family and they play essential roles in spermatogenesis, immunoregulation, and phagocytosis.Tyro3 was expressed at high levels during postnatal development and in the adult in the cortex.Tyro3 and Gas6 have neurotrophic roles in the nervous system.In addition, the signalling interactions of Axl and Tyro3 may play roles in tumourigenesis, inflammation as well as other cell proliferative diseases.
Immunogen	Purified recombinant fragment of Tyro3 (aa138-321) expressed in E. Coli.
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	ICC~~N/A 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. Christoph Heiring, Bjon Dahlbok, and Yves A. Muller. J. Biol. Chem Feb 2004; 279: 6952 - 6958. 2. Sassan Hafizi, Anna Gustafsson, Jonas Stenhoff. Int J Biochem Cell Biol. 2005 Nov;37(11):2344-56.

Images

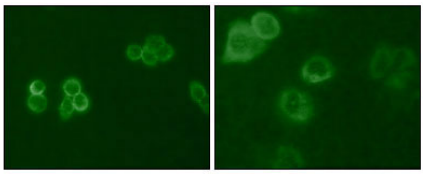


Figure 2: Immunofluorescence analysis of Hela (Left) and MCF-7 (Right) cells using Tyro3 mouse mAb (green).

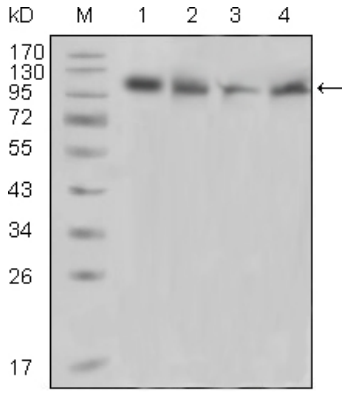
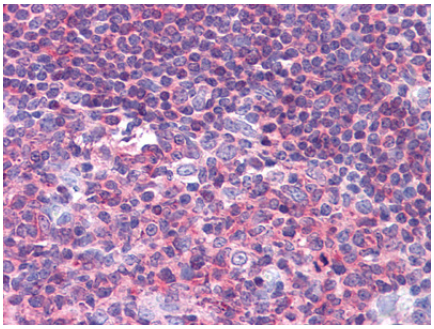


Figure 1: Western blot analysis using PYK2 mouse mAb against Raji (1), PMA induced THP-1 (2), Jurkat (3) and Ramos (4) cell lysate.

Figure 2: Immunohistochemical analysis of paraffin-embedded human Tonsil tissues using PYK2 mouse mAb.



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