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 # AO1173a

Specification

Tyro3 Antibody - Product Information

Application	**IF, WB, IHC**
Primary Accession	Q06418
Reactivity	**Human**
Host	**Mouse**
Clonality	**Monoclonal**
Isotype	**IgG1**

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.

Tyro3 Antibody - 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
IF~~1/200 - 1/1000
WB~~1:500~~2000
IHC~~1:200~~1000

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.

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Tyro3 Antibody - 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 - 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

Tyro3 Antibody - Images

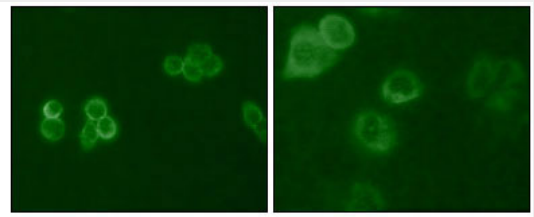


Figure 2: Immunofluorescence analysis of Hela (Left) and MCF-7 (Right) cells using Tyro3 mouse mAb (green).

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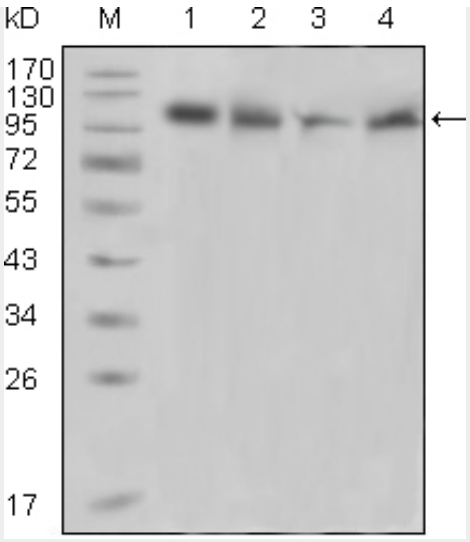


Figure 1: Western blot analysis using PYK2 mouse mAb against Raji (1), PMA induced THP-1 (2), Jurkat (3) and Ramos (4) cell lysate.

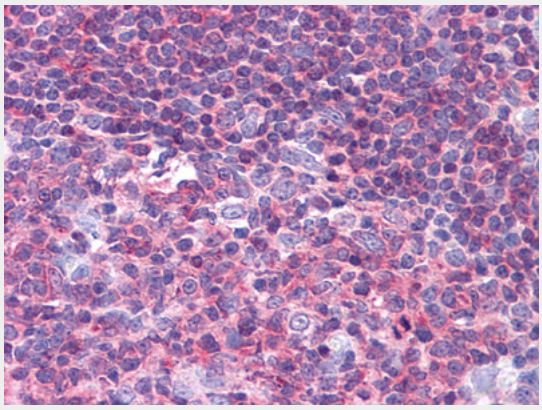


Figure 2: Immunohistochemical analysis of paraffin-embedded human Tonsil tissues using PYK2 mouse mAb.

Tyro3 Antibody - 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.