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TYRO3 Antibody
Purified Mouse Monoclonal Antibody (Mab)
Catalog # AM7679B

Specification

TYRO3 Antibody - Product Information

Application	**IHC-P, IF,E**
Primary Accession	Q06418
Other Accession	NP_006284
Reactivity	**Human**
Host	**Mouse**
Clonality	**Monoclonal**
Isotype	**IgG1,κ**

TYRO3 Antibody - 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
This TYRO3 Monoclonal antibody is generated from mouse immunized with human recombinant TYRO3 protein.

Dilution
IHC-P~~1:50~100
IF~~1:10~50
E~~Use at an assay dependent concentration.

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

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

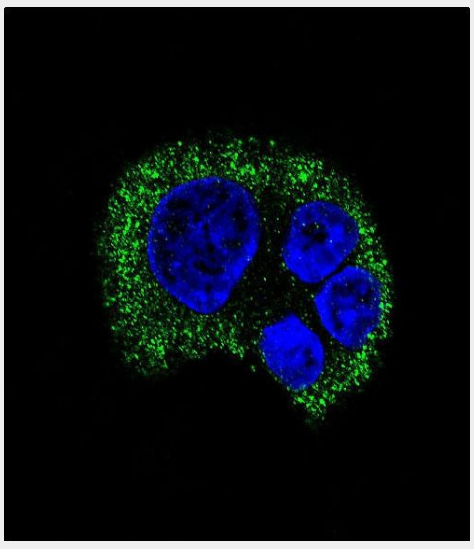
Tissue Location
Abundant in the brain and lower levels in other tissues

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



Confocal immunofluorescent analysis of TYRO3 Antibody (Cat#AM7679b) with HepG2 cell followed by Alexa Fluor® 488-conjugated goat anti-mouse IgG (green). DAPI was used to stain the cell nuclear (blue).

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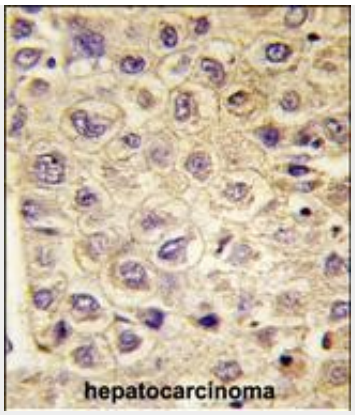

Formalin-fixed and paraffin-embedded human hepatocarcinoma tissue reacted with TYRO3 Antibody (Cat.#AM7679b), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.

TYRO3 Antibody - Background

The gene is part of a 3-member transmembrane receptor kinase receptor family with a processed pseudogene distal on chromosome 15. The encoded protein is activated by the products of the growth arrest-specific gene 6 and protein S genes and is involved in controlling cell survival and proliferation, spermatogenesis, immunoregulation and phagocytosis. The encoded protein has also been identified as a cell entry factor for Ebola and Marburg viruses.

TYRO3 Antibody - References

Association study between polymorphims in GAS6-TAM genes and carotid atherosclerosis. Hurtado B, et al. Thromb Haemost, 2010 Sep. PMID 20664904.
Protein S controls hypoxic/ischemic blood-brain barrier disruption through the TAM receptor Tyro3 and sphingosine 1-phosphate receptor. Zhu D, et al. Blood, 2010 Jun 10. PMID 20348395.
A genomic screen identifies TYRO3 as a MITF regulator in melanoma. Zhu S, et al. Proc Natl Acad Sci U S A, 2009 Oct 6. PMID 19805117.
TAM receptor tyrosine kinases: biologic functions, signaling, and potential therapeutic targeting in human cancer. Linger RM, et al. Adv Cancer Res, 2008. PMID 18620092.
Toward a confocal subcellular atlas of the human proteome. Barbe L, et al. Mol Cell Proteomics, 2008 Mar. PMID 18029348.