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Tyro3 Antibody

Purified Mouse Monoclonal Antibody (Mab)
Catalog # AM8451b

Product Information

Application	WB, E
Primary Accession	P55144
Reactivity	Human, Rat, Mouse
Host	Mouse
Clonality	Monoclonal
Isotype	IgG1,k
Clone Names	1444CT895.86.31
Calculated MW	96208

Additional Information

Gene ID	22174
Other Names	Tyrosine-protein kinase receptor TYRO3, Etk2/tyro3, TK19-2, Tyrosine-protein kinase DTK, Tyrosine-protein kinase RSE, Tyrosine-protein kinase TIF, Tyro3, Dtk, Rse, Tif
Target/Specificity	This Tyro3 antibody is generated from a mouse immunized with a recombinant protein.
Dilution	WB~~1:2000 E~~Use at an assay dependent concentration.
Format	Purified monoclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein G column, 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.

Protein Information

Name	Tyro3
Synonyms	Dtk, Rse, 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

Background

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. Plays also 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.

References

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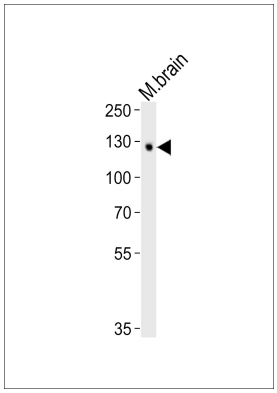
Images



Western blot analysis of lysate from mouse brain tissue lysate, using Tyro3 Antibody(Cat. #AM8451b). AM8451b was diluted at 1:2000. A goat anti-mouse IgG H&L(HRP) at 1:3000 dilution was used as the secondary antibody. Lysate at 20µg.