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# TYRO3 Antibody (C-term)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP7679b

## Product Information

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| **Application** | WB, IHC-P, E |
| **Primary Accession** | Q06418 |
| **Other Accession** | NP_006284 |
| **Reactivity** | Human, Mouse |
| **Predicted** | Rat |
| **Host** | Rabbit |
| **Clonality** | Polyclonal |
| **Isotype** | Rabbit IgG |
| **Clone Names** | RB1489 |
| **Calculated MW** | 96905 |
| **Antigen Region** | 842-873 |

## Additional Information

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| **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 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 842-873 amino acids from the C-terminal region of human TYRO3. |
| **Dilution** | WB~~1:1000 IHC-P~~1:100~500 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 (C-term) is for research use only and not for use in diagnostic or therapeutic procedures. |

## Protein Information

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| **Name** | TYRO3 |
| **Synonyms** | BYK, DTK, RSE, SKY, TIF |

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| **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 |

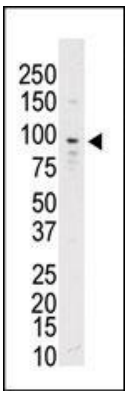
## Background

Protein kinases are enzymes that transfer a phosphate group from a phosphate donor, generally the g phosphate of ATP, onto an acceptor amino acid in a substrate protein. By this basic mechanism, 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. With more than 500 gene products, the protein kinase family is one of the largest families of proteins in eukaryotes. The family has been classified in 8 major groups based on sequence comparison of their tyrosine (PTK) or serine/threonine (STK) kinase catalytic domains.

## References

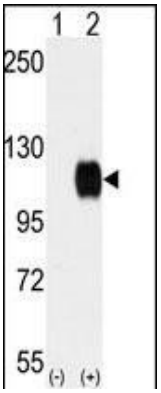

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## Images

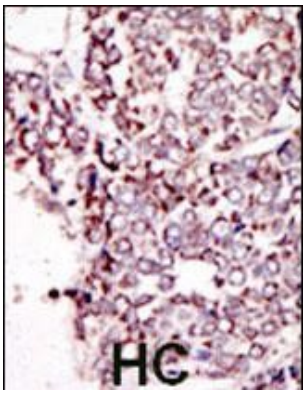



Western blot analysis of anti-SKY Pab (Cat. #AP7679b) in mouse brain lysate. SKY (arrow) was detected using purified Pab. Secondary HRP-anti-rabbit was used for signal visualization with chemiluminescence.

Western blot analysis of SKY (arrow) using rabbit polyclonal SKY Antibody (C-term) (Cat. #AP7679b).293 cell lysates (2 ug/lane) either nontransfected (Lane 1) or




transiently transfected with the SKY gene (Lane 2) (Origene Technologies).




Formalin-fixed and paraffin-embedded human cancer tissue reacted with the primary antibody, 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. BC = breast carcinoma; HC = hepatocarcinoma.

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