

#5585 Store at -20C

Tyro3 (D38C6) Rabbit mAb



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Applications:	Reactivity:	Sensitivity:	MW (kDa):	Source/Isotype:	UniProt ID:	Entrez-Gene Id:
WB, IP	H M R Mk	Endogenous	110, 130	Rabbit IgG	#Q06418	7301

Product Usage Information

Application	Dilution
Western Blotting	1:1000
Immunoprecipitation	1:50

Storage

Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA, 50% glycerol and less than 0.02% sodium azide. Store at -20°C. Do not aliquot the antibody.

Specificity / Sensitivity

Tyro3 (D38C6) Rabbit mAb detects endogeneous levels of total Tyro3 protein.

Source / Purification

Monoclonal antibody is produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Thr874 of human Tyro3 protein.

Background

Tyro3 is a receptor tyrosine kinase belonging to the TAM subfamily (Tyro3, Axl and Mer). All three members have similar domain structure composed of an extracellular region with 2 Ig-like domains, followed by 2 FNIII-like domains, a single transmembrane region, and a cytoplasmic tyrosine kinase domain (1). The natural ligand for Tyro3, as well as Axl and Mer, is Gas6 (growth arrest-specific gene 6) (1,2). Expression pattern and target knockout data indicate an important role of Tyro3 in apoptotic cell phagocytosis of dendritic cells and macrophages (3), NK cell differentiation (4), reproductive neuron survival and migration (5), osteoclast stimulation (6,7), as well as cortical and hippocampal neuron function (8). Both MAPK and PI3K pathways have been suggested as downstream targets of Tyro3 activation (7,8). Tyro3 has also been shown to be correlated to melanoma tumorigenesis, likely through its regulatory role in the expression of oncogenic microphthalmia-associated transcription factor (MITF) (9).

Background References

1. Binder, M.D. and Kilpatrick, T.J. (2009) *Neurosignals* 17, 277-87.
2. Nagata, K. et al. (1996) *J Biol Chem* 271, 30022-7.
3. Seitz, H.M. et al. (2007) *J Immunol* 178, 5635-42.
4. Caraux, A. et al. (2006) *Nat Immunol* 7, 747-54.
5. Pierce, A. et al. (2008) *Mol Endocrinol* 22, 2481-95.
6. Nakamura, Y.S. et al. (1998) *Stem Cells* 16, 229-38.
7. Katagiri, M. et al. (2001) *J Biol Chem* 276, 7376-82.
8. Prieto, A.L. et al. (2007) *Neuroscience* 150, 319-34.
9. Zhu, S. et al. (2009) *Proc Natl Acad Sci U S A* 106, 17025-30.

Species Reactivity

Species reactivity is determined by testing in at least one approved application (e.g., western blot).

Western Blot Buffer

IMPORTANT: For western blots, incubate membrane with diluted primary antibody in 5% w/v BSA, 1X TBS, 0.1% Tween® 20 at 4°C with gentle shaking, overnight.

Applications Key

WB: Western Blotting **IP:** Immunoprecipitation

Cross-Reactivity Key

H: human **M:** mouse **R:** rat **Hm:** hamster **Mk:** monkey **Vir:** virus **Mi:** mink **C:** chicken **Dm:** D. melanogaster
X: Xenopus **Z:** zebrafish **B:** bovine **Dg:** dog **Pg:** pig **Sc:** S. cerevisiae **Ce:** C. elegans **Hr:** horse
GP: Guinea Pig **Rab:** rabbit **All:** all species expected

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