

Tyro3 (D38C6) Rabbit mAb

Orders: 877-616-CELL (2355)
orders@cellsignal.com

Support: 877-678-TECH (8324)

Web: info@cellsignal.com
cellsignal.com

3 Trask Lane | Danvers | Massachusetts | 01923 | USA

For Research Use Only. Not for Use in Diagnostic Procedures.

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

Product Usage Information**Application**

Western Blotting
Immunoprecipitation

Dilution

1:1000
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.

For a carrier free (BSA and azide free) version of this product see product #64590.

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 structures composed of an extracellular region with 2 Ig-like domains, followed by 2 FNII-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

W: Western Blotting **IP:** Immunoprecipitation

Cross-Reactivity Key

H: Human **M:** Mouse **R:** Rat **Mk:** Monkey

Trademarks and Patents

Cell Signaling Technology is a trademark of Cell Signaling Technology, Inc.

All other trademarks are the property of their respective owners. Visit cellsignal.com/trademarks for more information.

Limited Uses

Except as otherwise expressly agreed in a writing signed by a legally authorized representative of CST, the following terms apply to Products provided by CST, its affiliates or its distributors. Any Customer's

terms and conditions that are in addition to, or different from, those contained herein, unless separately accepted in writing by a legally authorized representative of CST, are rejected and are of no force or effect.

Products are labeled with For Research Use Only or a similar labeling statement and have not been approved, cleared, or licensed by the FDA or other regulatory foreign or domestic entity, for any purpose. Customer shall not use any Product for any diagnostic or therapeutic purpose, or otherwise in any manner that conflicts with its labeling statement. Products sold or licensed by CST are provided for Customer as the end-user and solely for research and development uses. Any use of Product for diagnostic, prophylactic or therapeutic purposes, or any purchase of Product for resale (alone or as a component) or other commercial purpose, requires a separate license from CST. Customer shall (a) not sell, license, loan, donate or otherwise transfer or make available any Product to any third party, whether alone or in combination with other materials, or use the Products to manufacture any commercial products, (b) not copy, modify, reverse engineer, decompile, disassemble or otherwise attempt to discover the underlying structure or technology of the Products, or use the Products for the purpose of developing any products or services that would compete with CST products or services, (c) not alter or remove from the Products any trademarks, trade names, logos, patent or copyright notices or markings, (d) use the Products solely in accordance with CST Product Terms of Sale and any applicable documentation, and (e) comply with any license, terms of service or similar agreement with respect to any third party products or services used by Customer in connection with the Products.