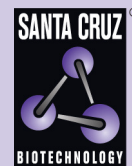


Tyro3 (C-20): sc-1095



The Power to Question

BACKGROUND

Receptor tyrosine kinases (RTKs) represent an important class of transmembrane signaling molecules. Binding of the extracellular domain of a RTK to its cognate ligand leads to receptor dimerization and the activation of the intrinsic tyrosine kinase activity of its intracellular kinase domain. The AXL/UFO subfamily of receptor tyrosine kinases is comprised of members Tyro3 (also referred to as BYK, Brt, Dtk, Rse, Tif or Sky), Axl (also called Tyro7 or UFO) and Mer (also called Nyk, c-Eyk and Tyro12). Members of this family have a common molecular structure which contain an N-terminal extracellular domain comprised of two Ig domains, two FNIII domains, a membrane spanning single helix followed by the cytoplasmic tyrosine kinase domain. These RTKs are functionally significant in spermatogenesis, immunoregulation and phagocytosis. Tyro3, Axl and Mer are widely expressed in adult tissues with their expression most abundant in brain, testis, lymphatic and vascular tissue. Tyro3 has been shown to undergo post-translational modifications including both tyrosine phosphorylation as well as glycosylation. Two proteins, Protein S and Gas6, have been proposed as ligands for the AXL/UFO family of receptors. Both function as anti-coagulants through an unknown mechanism. Gas6 was cloned as a growth arrest-specific gene, while Protein S is an abundant serum protein which is thought to act by indirectly inhibiting proteases involved in the coagulation response.

CHROMOSOMAL LOCATION

Genetic locus: TYRO3 (human) mapping to 15q15.1; Tyro3 (mouse) mapping to 2 E5.

SOURCE

Tyro3 (C-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of Tyro3 of human origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-1095 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

Tyro3 (C-20) is recommended for detection of Tyro3 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for Tyro3 siRNA (h): sc-36438, Tyro3 siRNA (m): sc-36439, Tyro3 shRNA Plasmid (h): sc-36438-SH, Tyro3 shRNA Plasmid (m): sc-36439-SH, Tyro3 shRNA (h) Lentiviral Particles: sc-36438-V and Tyro3 shRNA (m) Lentiviral Particles: sc-36439-V.

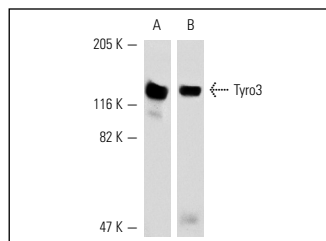
Molecular Weight of Tyro3: 120 kDa.

Positive Controls: Tyro3 (h): 293T Lysate: sc-116151, Hep G2 cell lysate: sc-2227 or mouse brain extract: sc-2253.

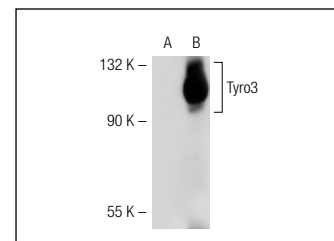
STORAGE

Store at 4° C, ****DO NOT FREEZE****. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

DATA



Tyro3 (C-20): sc-1095. Western blot analysis of Tyro3 expression in Hep G2 whole cell lysate (A) and mouse brain extract (B).



Tyro3 (C-20): sc-1095. Western blot analysis of Tyro3 expression in non-transfected: sc-117752 (A) and human Tyro3 transfected: sc-116151 (B) 293T whole cell lysates.

SELECT PRODUCT CITATIONS

- Chan, M.C., et al. 2000. Identification and regulation of receptor tyrosine kinases Rse and Mer and their ligand Gas6 in testicular somatic cells. *J. Androl.* 21: 291-302.
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- Eng, P.C., et al. 2008. Chronic angiotensin-converting enzyme inhibition up-regulates mouse kidney growth arrest specific-6 protein and the AXL subfamily of receptor tyrosine kinases. *J. Renin Angiotensin Aldosterone Syst.* 9: 238-241.
- Son, M.Y., et al. 2008. Expression profiles of protein tyrosine kinase genes in human embryonic stem cells. *Reproduction* 136: 423-432.
- Park, H.J., et al. 2012. The TAM-family receptor Mer mediates production of HGF through the RhoA-dependent pathway in response to apoptotic cells. *Mol. Biol. Cell* 23: 3254-3265.
- Long, Y., et al. 2013. Neurotoxicity of perfluorooctane sulfonate to hippocampal cells in adult mice. *PLoS ONE* 8: e54176.
- Burbridge, M.F., et al. 2013. S49076 is a novel kinase inhibitor of MET, AXL and FGFR with strong preclinical activity alone and in association with bevacizumab. *Mol. Cancer Ther.* E-Published.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

MONOS
Satisfaction
Guaranteed

Try **Tyro3 (A-7): sc-166359** or **Tyro3 (B-4): sc-166360**, our highly recommended monoclonal alternatives to Tyro3 (C-20).