SANTA CRUZ BIOTECHNOLOGY, INC.

Axl (C-20): sc-1096

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

The UFO family of receptor tyrosine kinases is comprised of subfamily members Rse (also designated Tyro3, Sky, Brt, Dtk, Etk2 and Tif), Axl (also designated UFO or ARK) and Mer (also designated Nyk or Eyk). Rse is expressed preferentially in the adult brain with lower expression in other tissues. Axl is found at highest levels in heart and skeletal muscle. Mer has been identified as a tyrosine kinase potentially involved in the development of glioblastomas. It is expressed at highest levels in ovary, prostate, lung and kidney. Gas6, a growth arrest specific gene, and the related anticoagulation factor Protein S have been identified as ligands for the UFO family of receptors.

REFERENCES

1. Janssen, J.W., et al. 1991. A novel putative tyrosine kinase receptor with oncogenic potential. Oncogene 6: 2113-2120.
2. Jia, R., et al. 1994. The proto-oncogene of v-eyk (v-ryk) is a novel receptor-type protein tyrosine kinase with extracellular Ig/GN-III domains. J. Biol. Chem. 269: 1839-1844.

CHROMOSOMAL LOCATION

Genetic locus: AXL (human) mapping to 19q13.2; Axl (mouse) mapping to 7 A3.

SOURCE

Axl (C-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of Axl 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-1096 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

Axl (C-20) is recommended for detection of Axl 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), immunohistochemistry (including paraffin-embedded sections) (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 Axl siRNA (h): sc-29769, Axl siRNA (m): sc-29770, Axl shRNA Plasmid (h): sc-29769-SH, Axl shRNA Plasmid (m): sc-29770-SH, Axl shRNA (h) Lentiviral Particles: sc-29769-V and Axl shRNA (m) Lentiviral Particles: sc-29770-V.

Molecular Weight of Axl: 140 kDa.

Positive Controls: Axl (m): 293T Lysate: sc-126473, Caki-1 cell lysate: sc-2224 or NIH/3T3 whole cell lysate: sc-2210.

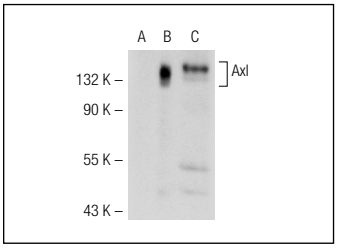
RESEARCH USE

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

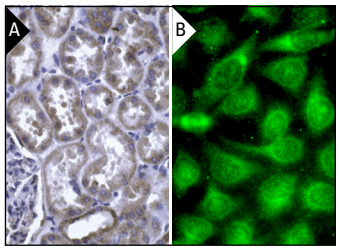
STORAGE

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

DATA



Axl (C-20): sc-1096. Western blot analysis of Axl expression in non-transfected 293T: sc-117752 (**A**), mouse Axl transfected 293T: sc-126473 (**B**) and Caki-1 (**C**) whole cell lysates.



Axl (C-20): sc-1096. Immunoperoxidase staining of formalin fixed, paraffin-embedded human kidney tissue showing cytoplasmic staining of cells in tubules (**A**). Immunofluorescence staining of methanol-fixed HeLa cells showing cytoplasmic localization (**B**).

SELECT PRODUCT CITATIONS

1. Lin, W.C., et al. 1999. Tie-1 protein tyrosine kinase: a novel independent prognostic marker for gastric cancer. Clin. Cancer Res. 5: 1745-1751.
2. Gustafsson, A., et al. 2009. Gas6 and the receptor tyrosine kinase Axl in clear cell renal cell carcinoma. PLoS ONE 4: e7575.
3. Yeh, C.Y., et al. 2011. Transcriptional activation of the Axl and PDGFR-α by c-Met through a Ras- and Src-independent mechanism in human bladder cancer. BMC Cancer 11: 139.
4. Lee, C.H., et al. 2012. Axl is a prognostic marker in oral squamous cell carcinoma. Ann. Surg. Oncol. 19: S500-S508.
5. Geng, S., et al. 2013. Cancer stem-like cells enriched with CD29 and CD44 markers exhibit molecular characteristics with epithelial-mesenchymal transition in squamous cell carcinoma. Arch. Dermatol. Res. 305: 35-47.
6. Hsu, S.H., et al. 2013. Hepatic loss of miR-122 predisposes mice to hepatobiliary cyst and hepatocellular carcinoma upon diethylnitrosamine exposure. Am. J. Pathol. 183: 1719-1730.
7. Yu, W., et al. 2014. Estrogen promotes Leydig cell engulfment by macrophages in male infertility. J. Clin. Invest. 124: 2709-2721.
8. Zhou, S., et al. 2014. Multipoint targeting of the PI3K/mTOR pathway in mesothelioma. J. Clin. Invest. 110: 2479-2488.
9. Martinho, O., et al. 2015. Axl as a modulator of sunitinib response in glioblastoma cell lines. Exp. Cell Res. 332: 1-10.