SANTA CRUZ BIOTECHNOLOGY, INC.

Axl (H-3): sc-166269

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. and Hanafusa, H. 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.

SOURCE

Axl (H-3) is a mouse monoclonal antibody raised against amino acids 771-894 of Axl of human origin.

PRODUCT

Each vial contains 200 µg IgG_1 kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Axl (H-3) is available conjugated to agarose (sc-166269 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-166269 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-166269 PE), fluorescein (sc-166269 FITC), Alexa Fluor® 488 (sc-166269 AF488), Alexa Fluor® 546 (sc-166269 AF546), Alexa Fluor® 594 (sc-166269 AF594) or Alexa Fluor® 647 (sc-166269 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-166269 AF680) or Alexa Fluor® 790 (sc-166269 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

APPLICATIONS

Axl (H-3) is recommended for detection of Axl of human origin by Western Blotting (starting dilution 1:100, 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 Axl siRNA (h): sc-29769, Axl shRNA Plasmid (h): sc-29769-SH and Axl shRNA (h) Lentiviral Particles: sc-29769-V.

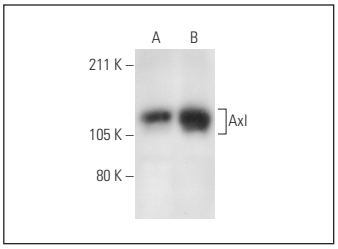
Molecular Weight of Axl: 140 kDa.

Positive Controls: FHs 173We cell lysate: sc-2417, Caki-1 cell lysate: sc-2224 or Axl (h): 293T Lysate: sc-114191.

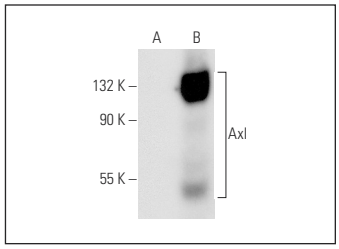
STORAGE

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

DATA



Axl (H-3): sc-166269. Western blot analysis of Axl expression in Caki-1 (**A**) and FHs 173We (**B**) whole cell lysates.



Axl (H-3): sc-166269. Western blot analysis of Axl expression in non-transfected: sc-117752 (**A**) and human Axl transfected: sc-114191 (**B**) 293T whole cell lysates.

SELECT PRODUCT CITATIONS

1. Shin, H., et al. 2017. Tropomyosin isoform Tpm2.1 regulates collective and amoeboid cell migration and cell aggregation in breast epithelial cells. Oncotarget 8: 95192-95205.
2. Ho, Y.J., et al. 2018. Single-cell RNA-seq analysis identifies markers of resistance to targeted BRAF inhibitors in melanoma cell populations. Genome Res. 28: 1353-1363.
3. Gallardo, M., et al. 2019. Curcumin rescues breast cells from epithelial-mesenchymal transition and invasion induced by anti-miR-34a. Int. J. Oncol. 56: 480-493.
4. Böhme, I., et al. 2020. Extracellular acidosis triggers a senescence-like phenotype in human melanoma cells. Pigment Cell Melanoma Res. 33: 41-51.
5. McDaniel, N.K., et al. 2020. AXL mediates cetuximab and radiation resistance through tyrosine 821 and the c-Abl kinase pathway in head and neck cancer. Clin. Cancer Res. 26: 4349-4359.
6. Kwon, J., et al. 2020. AKT drives sustained motility following MEK inhibition via promoting SNAIL and AXL in MDA-MB-231 LM2. Biochem. Biophys. Res. Commun. 528: 92-98.
7. Calaf, G.M., et al. 2020. Markers of epithelial-mesenchymal transition in an experimental breast cancer model induced by organophosphorous pesticides and estrogen. Oncol. Lett. 20: 84.
8. Song, W., et al. 2020. Axl inactivation inhibits mesothelioma growth and migration via regulation of p53 expression. Cancers 12: 2757.
9. Pietrobono, S., et al. 2020. ST3GAL1 is a target of the SOX2-GLI1 transcriptional complex and promotes melanoma metastasis through Axl. Nat. Commun. 11: 5865.

RESEARCH USE

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