

Axl (B-2): sc-166268



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

- Janssen, J.W., et al. 1991. A novel putative tyrosine kinase receptor with oncogenic potential. *Oncogene* 6: 2113-2120.
- 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.
- Mark, M.R., et al. 1994. Rse, a novel receptor-type tyrosine kinase with homology to Axl/UFO, is expressed at high levels in the brain. *J. Biol. Chem.* 269: 10720-10728.
- Neubauer, A., et al. 1994. Expression of Axl, a transforming receptor tyrosine kinase, in normal and malignant hematopoiesis. *Blood* 84: 1931-1941.
- Stitt, T.N., et al. 1995. The anticoagulation factor protein S and its relative, Gas6, are ligands for the Tyro3/Axl family of receptor tyrosine kinases. *Cell* 80: 661-670.

CHROMOSOMAL LOCATION

Genetic locus: AXL (human) mapping to 19q13.2.

SOURCE

Axl (B-2) is a mouse monoclonal antibody raised against amino acids 771-894 of Axl of human origin.

PRODUCT

Each vial contains 200 µg IgG₁ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

Axl (B-2) 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.

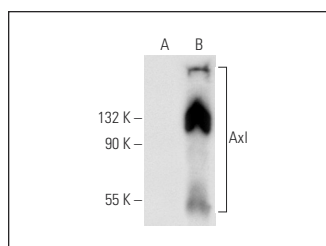
Molecular Weight of Axl: 140 kDa.

Positive Controls: HUV-EC-C whole cell lysate: sc-364180, Axl (h): 293T Lysate: sc-114191 or Caki-1 cell lysate: sc-2224.

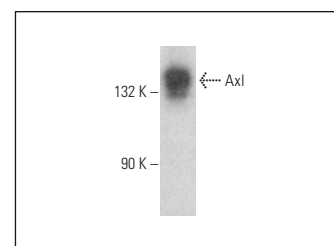
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

DATA



Axl (B-2): sc-166268. Western blot analysis of Axl expression in non-transfected: sc-117752 (A) and human Axl transfected: sc-114191 (B) 293T whole cell lysates.



Axl (B-2): sc-166268. Western blot analysis of Axl expression in HUV-EC-C whole cell lysate.

SELECT PRODUCT CITATIONS

- Lu, Y., et al. 2017. Regulated intramembrane proteolysis of the Axl receptor kinase generates an intracellular domain that localizes in the nucleus of cancer cells. *FASEB J.* 31: 1382-1397.
- Gorisse, L., et al. 2018. IQGAP1 binds the Axl receptor kinase and inhibits its signaling. *Biochem. J.* 475: 3073-3086.
- Khera, L., et al. 2021. The Axl-PYK2-PKCα axis as a nexus of stemness circuits in TNBC. *Life Sci. Alliance* 4: e202000985.
- Xie, S., et al. 2021. Japanese encephalitis virus NS2B-3 protein complex promotes cell apoptosis and viral particle release by down-regulating the expression of Axl. *Virol. Sin.* E-published.

STORAGE

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

RESEARCH USE

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

See **Axl (H-3): sc-166269** for Axl antibody conjugates, including AC, HRP, FITC, PE, and Alexa Fluor® 488, 546, 594, 647, 680 and 790.