abcam

ab314097

Anti-AXL antibody [BLR222K] - BSA free

Recombinant

Key facts

Isotype	IgG
Host species	Rabbit
Storage buffer	pH: 7.8 - 8.6 Preservative: 0.09% Sodium azide Constituents: 98% Borate buffered saline
Form	Liquid
Clonality	Monoclonal
Immunogen	Recombinant Fragment Protein within Human AXL aa 1-450. The exact immunogen used to generate this antibody is proprietary information. Database link P30530
Clone number	BLR222K

Reactivity data

Flow Cyt

Tested

Species	Human
Dilution info	-
Notes	-

Expected

Species	Mouse
Dilution info	Use at an assay dependent concentration.

Notes	-

ICC

Tested

Species	Human, Mouse
Dilution info	-
Notes	-

IP

Tested

Species	Human
Dilution info	-
Notes	-

Expected

Species	Mouse
Dilution info	Use at an assay dependent concentration.
Notes	-

WB

Tested

Species	Mouse, Human
Dilution info	-
Notes	-

Target data

See full target information AXL

Function	Receptor tyrosine kinase that transduces signals from the extracellular matrix into the cytoplasm by binding growth factor GAS6 and which is thus regulating many

physiological processes including cell survival, cell proliferation, migration and differentiation. Ligand binding at the cell surface induces dimerization and autophosphorylation of AXL. Following activation by ligand, AXL binds and induces tyrosine phosphorylation of PI3-kinase subunits PIK3R1, PIK3R2 and PIK3R3; but also GRB2, PLCG1, LCK and PTPN11. Other downstream substrate candidates for AXL are CBL, NCK2, SOCS1 and TNS2. Recruitment of GRB2 and phosphatidylinositol 3 kinase regulatory subunits by AXL leads to the downstream activation of the AKT kinase. GAS6/AXL signaling plays a role in various processes such as endothelial cell survival during acidification by preventing apoptosis, optimal cytokine signaling during human natural killer cell development, hepatic regeneration, gonadotropin-releasing hormone neuron survival and migration, platelet activation, or regulation of thrombotic responses. Also plays an important role in inhibition of Toll-like receptors (TLRs)-mediated innate immune response. (Microbial infection) Acts as a receptor for lassa virus and lymphocytic choriomeningitis virus, possibly through GAS6 binding to phosphatidyl-serine at the surface of virion envelope. (Microbial infection) Acts as a receptor for Ebolavirus, possibly through GAS6 binding to phosphatidyl-serine at the surface of virion envelope. (Microbial infection) Promotes Zika virus entry in glial cells, Sertoli cells and astrocytes (PubMed:28076778, PubMed:29379210, PubMed:31311882). Additionally, Zika virus potentiates AXL kinase activity to antagonize type I interferon signaling and thereby promotes infection (PubMed:28076778). Interferon signaling inhibition occurs via an SOCS1-dependent mechanism (PubMed:29379210).

Storage

Shipped at conditions	Blue Ice
Appropriate short-term storage duration	Up to 12 months
Appropriate short-term storage conditions	+4°C
Appropriate long-term storage conditions	+4°C

Notes

REACH authorisation
Abcam has not and does not intend to apply for the REACH Authorisation of customers' uses of products that contain European Authorisation list (Annex XIV) substances.
It is the responsibility of our customers to check the necessity of application of REACH Authorisation, and any other relevant authorisations, for their intended uses.

Supplementary info

This supplementary information is collated from multiple sources and compiled automatically.

Activity summary	The Axl protein also known as AXL receptor tyrosine kinase plays a significant role in cell signaling. It has a molecular weight of approximately 98 kDa. Axl is a transmembrane receptor that is expressed in a variety of tissues including the immune system reproductive organs and the central nervous system. It is mainly recognized for transmitting signals from the extracellular matrix into the cytoplasm by binding with its ligand Gas6.
Biological function summary	Axl is important in mediating cell survival proliferation and migration. It functions as part of the TAM family of receptors which also includes Tyro3 and Mer. Axl often forms complexes with these receptors to facilitate efficient signaling. This interaction triggers phosphorylation events that activate downstream signaling proteins reinforcing its influence in cellular functions.
Pathways	Axl is deeply involved in the PI3K-Akt and MAPK signaling pathways which are central to cellular growth and survival. In these pathways Axl interacts closely with proteins like PI3K and Akt to regulate processes such as apoptosis and metabolism. Its interaction with these pathways places Axl as an important modulator of intracellular signaling cascades.
Associated diseases and disorders	Axl has been implicated in cancer progression and immune response dysregulation. In many cancer types Axl overexpression links to tumor invasion metastasis and resistance to therapy. Moreover Axl’s role in autoimmune diseases becomes evident through its association with the Gas6 protein. Exploring these connections furthers understanding of how Axl's aberrant activity influences health and disease.

Product promise

Tested

We have tested this species and application combination and it works. It is covered by our product promise.

Expected

We have not tested this specific species and application combination in-house, but expect it will work. It is covered by our product promise.

Predicted

This species and application combination has not been tested, but we predict it will work based on strong homology. However, this combination is not covered by our product promise.

Not recommended

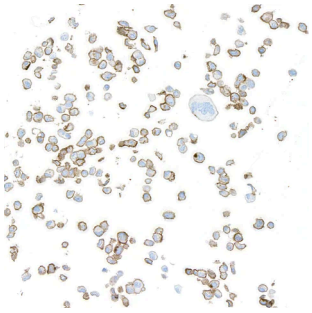
We do not recommend this combination. It is not covered by our product promise.

We are dedicated to supporting your work with high quality reagents and we are here for you every step of the way should you need us.

In the unlikely event of one of our products not working as expected, you are covered by our product promise.

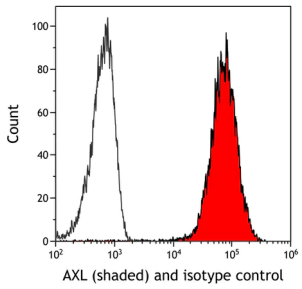
Full details and terms and conditions can be found here:
Terms & Conditions.

7 product images



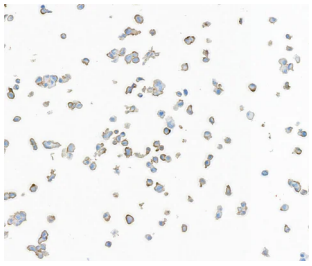
Immunocytochemistry - Anti-AXL antibody [BLR222K] - BSA free (ab314097)

Detection of human AXL by immunocytochemistry. Sample: FFPE section of DU145 cells. Antibody: Rabbit antiAXL recombinant monoclonal antibody [BLR222K] (A700-222). Secondary: HRP-conjugated goat antirabbit IgG.



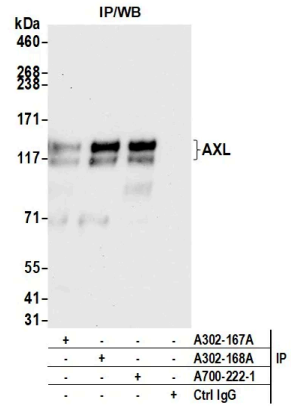
Flow Cytometry - Anti-AXL antibody [BLR222K] - BSA free (ab314097)

Detection of human AXL (shaded) in OVCAR8 cells by flow cytometry. Antibody: Rabbit anti-AXL recombinant monoclonal antibody [BLR222K] (A700-222) or isotype control (unshaded). Secondary: DyLight® 650-conjugated goat anti-rabbit IgG.



Immunocytochemistry - Anti-AXL antibody [BLR222K] - BSA free (ab314097)

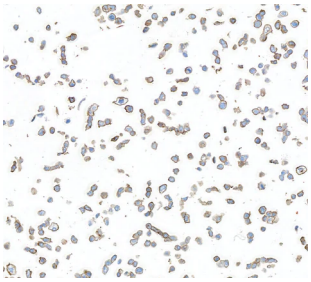
Detection of human AXL by immunocytochemistry. Sample: FFPE section of HDLM-2 cells. Antibody: Rabbit anti-AXL recombinant monoclonal antibody [BLR222K] (A700-222). Secondary: HRP-conjugated goat antirabbit IgG.



Immunoprecipitation - Anti-AXL antibody [BLR222K] - BSA free (ab314097)

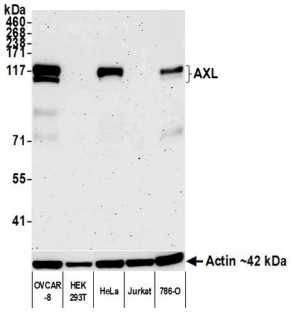
Samples: Whole cell lysate (1.0 mg per IP reaction; 20% of IP loaded) from OVCAR-8 cells prepared using NETN lysis buffer. Antibodies: Rabbit anti-AXL recombinant monoclonal antibody [BLR222K] (A700-222) used for IP at 6 µl/mg lysate. AXL was also immunoprecipitated by an antibody against a different epitope of AXL (A302-167A) and a polyclonal antibody against the same epitope of AXL (A302-168A). For blotting immunoprecipitated AXL, A700-222 was used at 1:1000. Detection: Chemiluminescence with an exposure time of 10 seconds.
All lanes:
Immunoprecipitation - Anti-AXL antibody [BLR222K] - BSA free (ab314097) at 1/1000 dilution

All lanes:
OVCAR-8 cells at 1 mg



Immunocytochemistry - Anti-AXL antibody [BLR222K] - BSA free (ab314097)

Detection of mouse AXL by immunocytochemistry. Sample: FFPE section of AML12 cells. Antibody: Rabbit anti-AXL recombinant monoclonal antibody [BLR222K] (A700-222). Secondary: HRP-conjugated goat antirabbit IgG.



Western blot - Anti-AXL antibody [BLR222K] - BSA free (ab314097)

Samples: Whole cell lysate (10 µg) from OVCAR-8, HEK293T, HeLa, Jurkat, and 786-O cells prepared using NETN lysis buffer. Antibody: Rabbit anti-AXL recombinant monoclonal antibody [BLR222K] (A700-222 lot 1) used at 1:1000. Secondary: HRP-conjugated goat anti-rabbit IgG. Detection: Chemiluminescence with an exposure time of 3 minutes.
All lanes:
Western blot - Anti-AXL antibody [BLR222K] - BSA free (ab314097) at 1/1000 dilution

Lane 1:
OVCAR-8 Whole cell lysate at 10 µg

Lane 2:
HEK293T Whole cell lysate at 10 µg

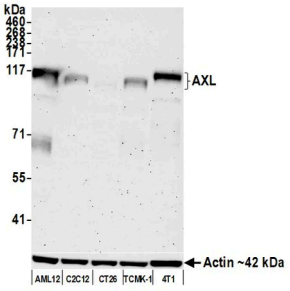
Lane 3:
HeLa Whole cell lysate at 10 µg

Lane 4:
Jurkat Whole cell lysate at 10 µg

Lane 5:
786-O Whole cell lysate at 10 µg

Secondary

All lanes:
HRP-conjugated goat anti-rabbit IgG



Western blot - Anti-AXL antibody [BLR222K] - BSA free (ab314097)

Samples: Whole cell lysate (25 µg) from AML12, C2C12, CT26, TCMK-1, and 4T1 cells prepared using NETN lysis buffer. Antibody: Rabbit anti-AXL recombinant monoclonal antibody [BLR222K] (A700-222 lot 1) used at 1:1000. Secondary: HRP-conjugated goat anti-rabbit IgG. Detection: Chemiluminescence with an exposure time of 3 minutes. Lower Panel: Rabbit anti-Actin recombinant monoclonal antibody [BLR057F].
All lanes:
Western blot - Anti-AXL antibody [BLR222K] - BSA free (ab314097) at 1/1000 dilution

Lane 1:
AML12 Whole cell lysate at 25 µg

Lane 2:
C2C12 Whole cell lysate at 25 µg

Lane 3:
CT26 Whole cell lysate at 25 µg

Lane 4:

TCMK-1 Whole cell lysate at 25 µg

Lane 5:
4T1 Whole cell lysate at 25 µg

Secondary

All lanes:
HRP-conjugated goat anti-rabbit IgG.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.