

AXL Antibody

Purified Mouse Monoclonal Antibody Catalog # AO1273a

Specification

AXL Antibody - Product Information

Application WB, ICC, E
Primary Accession
Reactivity Human
Host Mouse
Clonality Monoclonal
Isotype IgG1

Calculated MW 97.4kDa KDa

Description

AXL: AXL receptor tyrosine kinase, also known as UFO, JTK11. Entrez Protein NP_001690. It is a member of the receptor tyrosine kinase subfamily. Although it is similar to other receptor tyrosine kinases, this protein represents a unique structure of the extracellular region that juxtaposes IgL and FNIII repeats. It transduces signals from the extracellular matrix into the cytoplasm by binding growth factors like vitamin K-dependent protein growth-arrest-specific gene 6. It is involved in the stimulation of cell proliferation and can also mediate cell aggregation by homophilic binding. Alternatively spliced transcript variants encoding different isoforms have been identified.

Immunogen

Purified recombinant extracellular fragment of human AXL fused with hlgGFc tag expressed in HEK293 cell line.

Formulation

Ascitic fluid containing 0.03% sodium azide.

AXL Antibody - Additional Information

Gene ID 558

Other Names

Tyrosine-protein kinase receptor UFO, 2.7.10.1, AXL oncogene, AXL, UFO

Dilution

WB~~1/500 - 1/2000 ICC~~N/A E~~N/A

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

AXL Antibody is for research use only and not for use in diagnostic or therapeutic procedures.



AXL Antibody - Protein Information

Name AXL

Synonyms UFO

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.

Cellular Location

Cell membrane; Single-pass type I membrane protein

Tissue Location

Highly expressed in metastatic colon tumors. Expressed in primary colon tumors. Weakly expressed in normal colon tissue.

AXL Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

AXL Antibody - Images



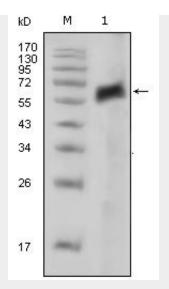


Figure 1: Western blot analysis using AXL mouse mAb against extracellular domain of human AXL (aa19-444).

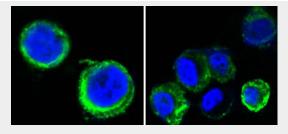


Figure 2: Confocal immunofluorescence analysis of methanol-fixed HEK293 cells trasfected with AXL-hlgGFc using AXL mouse mAb(green), showing cytoplasmic and membrane localization. Blue: DRAQ5 fluorescent DNA dye.

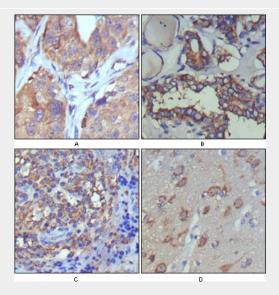
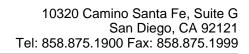


Figure 2: Immunohistochemical analysis of paraffin-embedded human lung cancer (A), thyroid cancer (B), lymph node (C) and brain (D) showing cytoplasmic and extracellular matrix localization using WNT5A mouse mAb with DAB staining.

AXL Antibody - References

1. Br J Cancer. 2006 May 22;94(10):1446-51. 2. Proc Natl Acad Sci U S A. 2006 Apr





11;103(15):5799-804.