

AXL Rabbit pAb

AXL Rabbit pAb Catalog # AP50934

Product Information

Application WB, IHC-P, IHC-F, IF

Primary Accession P30530

Reactivity Human, Dog, Horse

Host Rabbit Clonality Polyclonal **Calculated MW** 98337 **Physical State** Liquid

Immunogen KLH conjugated synthetic peptide derived from human AXL

Epitope Specificity 151-250/894

Isotype IgG

Purity affinity purified by Protein A

Buffer

SUBCELLULAR LOCATION

SIMILARITY

0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.

Cell membrane; Single-pass type I membrane protein.

Belongs to the protein kinase superfamily. Tyr protein kinase family. AXL/UFO subfamily. Contains 2 fibronectin type-III domains. Contains 2 Ig-like C2-type

(immunoglobulin-like) domains. Contains 1 protein kinase domain

SUBUNIT Heterodimer and heterotetramer with ligand GAS6. Interacts with CBL, GRB2,

LCK, NCK2, PIK3R1, PIK3R2, PIK3R3, PLCG1, SOCS1 and TENC1. Part a complex including AXL, TNK2 and GRB2, in which GRB2 promotes AXL recruitment by

TNK2.

Post-translational modifications

Important Note

Phosphorylated at tyrosine residues by autocatalysis, which activates kinase

activity.

DISEASE Note=AXL and its ligand GAS6 are highly expressed in thyroid carcinoma

tissues, and might thus be involved in thiroid tumorigenesis. Overexpression of AXL and its ligand was also detected in many other cancers such as myeloptoliferative disorders, prostatic carcinoma cells, or breast cancer. This product as supplied is intended for research use only, not for use in

human, therapeutic or diagnostic applications.

The protein encoded by this gene is a member of the receptor tyrosine kinase **Background Descriptions** subfamily. Although it is similar to other receptor tyrosine kinases, the Axl

> 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 such as vitamin K dependent protein growth arrest specific gene 6. It is involved in the stimulation of cell proliferation. This receptor can also mediate cell

aggregation by homophilic binding. Axl is a chronic myelogenous leukemia associated oncogene and also associated with colon cancer and

melanoma. The AxI gene is evolutionarily conserved between vertebrate species. This gene has two different alternatively spliced transcript variants

(AXL1 and AXL2).

Additional Information

Gene ID 558

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

Target/Specificity Highly expressed in metastatic colon tumors. Expressed in primary colon

tumors. Weakly expressed in normal colon tissue.

Dilution WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500

Storage Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When

reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody

is stable for at least two weeks at 2-4 °C.

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.

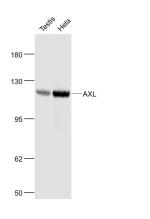
Background

The protein encoded by this gene is a member of the receptor tyrosine kinase subfamily. Although it is similar to other receptor tyrosine kinases, the Axl 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 such as vitamin K dependent protein growth arrest specific gene 6. It is involved in the stimulation of cell proliferation. This receptor can also mediate cell aggregation by homophilic binding. Axl is a chronic myelogenous leukemia associated oncogene and also associated with colon cancer and melanoma. The Axl gene is evolutionarily conserved between vertebrate species. This gene has two different alternatively spliced transcript variants (AXL1 and AXL2).

References

Partanen J., et al. Proc. Natl. Acad. Sci. U.S.A. 87:8913-8917(1990). O'Bryan J.P., et al. Mol. Cell. Biol. 11:5016-5031(1991). Janssen J.W.G., et al. Oncogene 6:2113-2120(1991). Grimwood J., et al. Nature 428:529-535(2004). Lee S.-T., et al. Oncogene 8:3403-3410(1993).

Images



Sample:

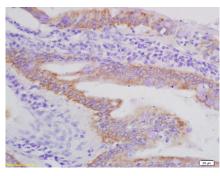
Testis (Mouse) Lysate at 40 ug Hela (Human) Cell Lysate at 30 ug Primary: Anti-AXL (AP50934) at 1/1000 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000

dilution

Predicted band size: 140/120/65 kD

Observed band size: 120 kD



Tissue/cell: human colon carcinoma; 4% Paraformaldehyde-fixed and paraffin-embedded; Antigen retrieval: citrate buffer (0.01M, pH 6.0), Boiling bathing for 15min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum,C-0005) at 37°C for 20 min; Incubation: Anti-AXL/UFO Polyclonal Antibody, Unconjugated(AP50934) 1:200, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining

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