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AXL Rabbit pAb

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Catalog # AP50934

Product Information

Application	WB, IHC-P, IHC-F, IF
Primary Accession	P30530
Reactivity	Human, Mouse
Predicted	Rat, Dog, Horse, Rabbit
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	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SUBCELLULAR LOCATION	Cell membrane; Single-pass type I membrane protein.
SIMILARITY	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	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.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	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).

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,IF=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.

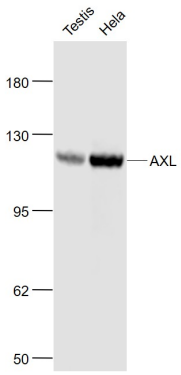
Background

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).

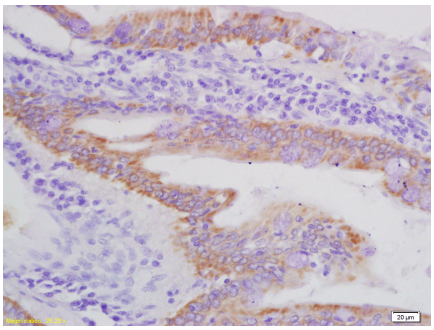
References

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℃ 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