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AXL Antibody

Purified Mouse Monoclonal Antibody
Catalog # AO1203a

Product Information

Application	WB, E
Primary Accession	P30530
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Clone Names	1B3A2
Isotype	IgG1
Calculated MW	98337
Description	AXL: AXL receptor tyrosine kinase. The protein encoded by this gene 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 fragment of AXL(aa466-530) expressed in E. Coli.
Formulation	Ascitic fluid containing 0.03% sodium azide.

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 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.

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.

References

1. Nature. 2005 Oct 20;437(7062):1173-8. 2. Mol Cell Biol. 2005 Nov;25(21):9324-39. 3. Circ Res. 2007 Mar 2;100(4):502-9.

Images

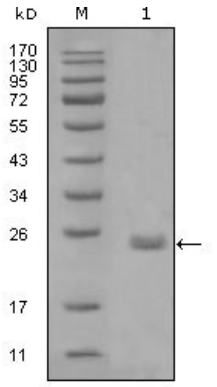

Figure 1: Western blot analysis using AXL mouse mAb against truncated Trx-AXL recombinant protein (1).