

Human Axl Antibody

Monoclonal Mouse IgG₁ Clone # 108724 Catalog Number: MAB154

Species Reactivity	Human		
Specificity	Detects human Axl in direct ELISAs. In direct ELISAs, this antibody shows no cross-reactivity with recombinant mouse Axl, recombinant human (rh) Dtk or rhMer.		
Source	Monoclonal Mouse IgG ₁ Clone # 108724		
Purification	Protein A or G purified from hybridoma culture supernatant		
Immunogen	Mouse myeloma cell line NS0-derived recombinant human Axl Met1-Pro440 Accession # AAA61243		
Formulation	Lyophilized from a 0.2 μm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied as a 0.2 μm filtered solution in PBS.		
APPLICATIONS			
Please Note: Optimal diluti	ons should be determined by each laboratory for each	application. General Protocols are available in the Technical Information section on our website.	
Human Axl Sandwich Immunoassay		Reagent	
ELISA Capture	2-8 μg/mL	Human Axl Antibody (Catalog # MAB154)	
ELISA Detection	0.1-0.4 μg/mL	Human Axl Biotinylated Antibody (Catalog # BAF154)	
Standard		Recombinant Human Axl Fc Chimera (Catalog # 154-AL)	

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.5 mg/mL in sterile PBS.	
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C	
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. ● 12 months from date of receipt, -20 to -70 °C as supplied.	

- 1 month, 2 to 8 °C under sterile conditions after reconstitution.
- 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

DESCRIPTION

AxI (Ufo, Ark), Dtk (Sky, Tyro3, Rse, Brt), and Mer (human and mouse homologues of chicken c-Eyk) constitute a subfamily of the receptor tyrosine kinases (1,2). The extracellular domains of these proteins contain two Ig-like motifs and two fibronectin type III motifs. This characteristic topology is also found in neural cell adhesion molecules and in receptor tyrosine phosphatases. The human Axl cDNA encodes an 887 amino acid (aa) precursor that includes an 18 as signal sequence, a 426 aa extracellular domain, a 21 aa transmembrane segment, and a 422 aa cytoplasmic domain. The extracellular domains of human and mouse Axl share 81% aa sequence identity. A short alternately spliced form of human Axl is distinguished by a 9 aa deletion in the extracellular juxtamembrane region. These receptors bind the vitamin K-dependent protein growth arrest specific gene 6 (Gas6) which is structurally related to the anticoagulation factor protein S. Binding of Gas6 induces receptor autophosphorylation and downstream signaling pathways that can lead to cell proliferation, migration, or the prevention of apoptosis (3). This family of tyrosine kinase receptors is involved in hematopoiesis, embryonic development, tumorigenesis, and regulation of testicular functions.

References:

- 1. Yanagita, M. (2004) Curr. Opin. Nephrol. Hypertens. 13:465.
- Nagata, K. et al. (1996) J. Biol. Chem. 22:30022.
- 3. Holland, S. et al. (2005) Canc. Res. 65:9294.

