

DESCRIPTION	
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
Conjugate	Allophycocyanin Excitation Wavelength: 620-650 nm Emission Wavelength: 660-670 nm
Formulation	Supplied in a saline solution containing BSA and Sodium Azide. See Certificate of Analysis for details. *Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.

APPLICATIONS		
Please Note: Optimal dilutions should be determined by each laboratory for each application. <i>General Protocols</i> are available in the <i>Technical Information</i> section on our website.		
	Recommended Concentration	Sample
Flow Cytometry	10 µL/10 ⁶ cells	See Below
Knockout Validated	Axl is specifically detected in A431 human epithelial carcinoma parental cell line but is not detectable in Axl knockout A431 cell line.	

DATA	
<p>Flow Cytometry</p> <p>Detection of Axl in HeLa Human Cell Line by Flow Cytometry. HeLa human cervical epithelial carcinoma cell line was stained with Mouse Anti-Human Axl APC-conjugated Monoclonal Antibody (Catalog # FAB154A, filled histogram) or isotype control antibody (Catalog # IC002A, open histogram). View our protocol for Staining Membrane-associated Proteins.</p>	<p>Flow Cytometry</p> <p>Detection of Axl in A431 Human Cell Line by Flow Cytometry. A431 human epithelial carcinoma cell line was stained with APC-conjugated Mouse Anti-Human Axl Monoclonal Antibody (Catalog # FAB154A, filled histogram) or isotype control antibody (Catalog # IC002A, open histogram). View our protocol for Staining Membrane-associated Proteins.</p>
<p>Knockout Validated</p> <p>Axl Specificity is Shown by Flow Cytometry in Knockout Cell Line. Axl knockout A431 human epithelial carcinoma cell line was stained with APC-conjugated Mouse Anti-Human Axl Monoclonal Antibody (Catalog # FAB154A, filled histogram) or isotype control antibody (Catalog # IC002A, open histogram). No staining in the Axl knockout A431 cell line was observed. View our protocol for Staining Membrane-associated Proteins.</p>	

PREPARATION AND STORAGE	
Shipping	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	Protect from light. Do not freeze. ● 12 months from date of receipt, 2 to 8 °C as supplied.

BACKGROUND

Axl (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 aa 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.
2. Nagata, K. *et al.* (1996) *J. Biol. Chem.* **22**:30022.
3. Holland, S. *et al.* (2005) *Canc. Res.* **65**:9294.