

## Mouse Anti-Human Axl Monoclonal Antibody (Clone #AB205)

<b>Catalog#:</b>	<b>Quantity</b>	<b>Lot#</b>
AB205	200 µg	0706

**Source:** Hybridoma cell line was selected from a mouse myeloma fused with B cells obtained from a mouse immunized with purified recombinant human Axl extracellular domain. IgG fraction of the cell culture supernatant was purified by Protein A affinity chromatography.

**Formulation:** Lyophilized powder lyophilized from phosphate-buffered saline (PBS)

**Preservative:** None.

**Purity:** >97% on 15% SDS-PAGE.

**Sterility:** 0.2 µm membrane-filtered and packaged aseptically.

**QC Tests:** SDS-PAGE, Western Blot, direct ELISA

### Reconstitution and Use:

Reconstitute the contents of the vial using sterile phosphate-buffered saline (PBS) to a concentration no less than 100 µg/ml and aliquot for future use. (*If the initial rehydration is too dilute, activity may be lost due to the non-specific adsorption to the container*). The solution can then be further diluted to a working stock solution.

### Storage and Stability:

Upon receiving, store the product at -20°C. After reconstitution, store the working aliquots at 2-8°C for no more than 3 months. For extended storage, aliquot the rehydrated solution (100 µg/ml) and freeze at -70°C or -20°C. Avoid repeated freezing and thawing. More dilute solutions stored at -20°C will lose activity faster.

### About Axl:

Axl is coined from the Greek word "anexelekto", meaning out of control, also known as UFO or Ark. It is a type I transmembrane receptor tyrosine kinase with transforming activity. The extracellular domain contains two Ig-like motifs and two fibronectin type III motifs. It binds 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. Recent studies suggest that this family of tyrosine kinase receptors may be involved in hematopoiesis, embryonic development, tumorigenesis and regulation of testicular functions.

### Specificity:

This antibody was selected for its ability to detect rhAxl in direct ELISAs and Western blots.

### Applications:

**Western blot** - This antibody can be used at less than 1 µg/mL with the appropriate secondary antibodies to detect human Axl. It detects both reducing and non-reducing Axl on Western. Chemiluminescent detection with SuperSignal West Femto Maximum Sensitivity Substrate (Thermo Fisher Scientific, Cat#: 34094) will increase sensitivity by more than 10-fold, therefore, need much low concentration of this antibody for Western.

**Direct ELISA** - This antibody can be used at 1 µg/mL with the appropriate secondary antibodies to detect soluble human Axl directly coated on an ELISA plate. The detection limit for soluble rhAxl is less than 2 ng/well.

**Optimal dilutions should be determined by individuals for each application.**

### References:

Vyacheslav A. et al. 2006, **Axl, A Receptor Tyrosine Kinase, Mediates Flow-Induced Vascular Remodeling.** *Circ. Res.* 98:1446-1452.

Sasaki T et al., 2006, **Structural basis for Gas6–Axl signaling.** *EMBO Journal* (2006) 25:80–87