human and mouse Axl when phosphorylated at Y779. 

Source 

Polyclonal Rabbit IgG 

Purification 

Antigen and protein A Affinity-purified 

Immunogen 

Phosphopeptide containing human Axl Y779 site 

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 either lyophilized or as a 0.2 μm filtered solution in PBS. 

APPLICATIONS 

Please Note: Optimal dilutions should be determined by each laboratory for each application. General Protocols are available in the Technical Information section on our website. 

Recommended Concentration Sample 

Western Blot 1 μg/mL See Below 

Immunocytochemistry 5-15 μg/mL See Below 

Immunohistochemistry 5-15 μg/mL See Below 

DATA 

Western Blot 

Detection of Human Phospho-Axl (Y779) by Western Blot. Western blot shows lysates of A172 human glioblastoma cell line untreated (-) or treated (+) with WI38 human lung cell line conditioned media (WI38 CM) for 15 minutes. 

PVDF membrane was probed with 1 μg/mL of Human Phospho-Axl (Y779) Antigen Affinity-purified Polyclonal Antibody, followed by HRP-conjugated Anti-Rabbit IgG Secondary Antibody (Catalog # HAF008). A specific band was detected for Phospho-Axl (Y779) at approximately 140 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1. 

Immunohistochemistry 

Phospho-Axl (Y779) in Human Stomach Cancer Tissue. Axl phosphorylated at site Y779 was detected in immersion fixed paraffin-embedded sections of human stomach cancer tissue using Human Phospho-Axl (Y779) Antigen Affinity-purified Polyclonal Antibody (Catalog # AF2228) at 15 μg/mL overnight at 4 °C. Tissue was stained using the Anti-Rabbit HRP-DAB Cell & Tissue Staining Kit (brown; Catalog # CTS005) and counterstained with hematoxylin (blue). Specific labeling was localized to the cytoplasm of epithelial cells. View our protocol for Chromogenic IHC Staining of Paraffin-embedded Tissue Sections.
Immunocytochemistry

Phospho-Axl (Y779) in A172 Human Cell Line. Axl phosphorylated at Y779 (panels B, D) and total Axl (panels A, C) were assessed in immersion fixed A172 human glioblastoma cells incubated with (panels C, D) or without (panels A, B) pervanadate. Phospho-Axl was detected using Rabbit Anti-Human Phospho-Axl (Y779) Antigen Affinity-purified Polyclonal Antibody (Catalog # AF2228) at 10 µg/ml for 3 hours at room temperature. Cells were stained using the NorthernLights™ 557-conjugated Anti-Rabbit IgG Secondary Antibody (red, panels B, D); Catalog # NL004) and counterstained using DAPI (blue). Total Axl was detected using Goat Anti-Human Axl Antigen Affinity-purified Polyclonal Antibody (green, panels A, C); Catalog # NL003). Specific staining was localized to cytoplasm. View our protocol for Fluorescent ICC Staining of Cells on Coverslips.

PREPARATION AND STORAGE

Reconstitution
Reconstitute at 0.2 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

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 alternatively 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: