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ProductInformation

AXL/Fc CHIMERA
Human, Recombinant
Expressed in mouse NSO cells

Product Number **A 1973**

Product Description

Recombinant Human Axl/Fc Chimera is produced from a DNA sequence encoding the extracellular domain of human Axl (amino acid residues 1 to 442)[1] fused to the C-terminal 6X histidine-tagged Fc region of human IgG1 by a peptide linker. Mature human Axl, a disulfide-linked homodimeric protein, begins at Glu 26 (based on N-terminal sequencing). The reduced monomer has a calculated molecular mass of approximately 72.3 kDa. Due to glycosylation, the recombinant protein migrates to approximately 100 to 110 kDa under reducing conditions. Mouse and human Axl exhibit approximately 87.6% amino acid sequence identity.[2]

Axl (Ufo, Ark), Dtk (Sky, Tyro3, Rse, Brt) and Mer (human and murine homologues of chicken c-Eyk) are members of a receptor tyrosine kinase subfamily. Their extracellular domains have two Ig-like motifs and two fibronectin type III motifs.[2, 3] These receptors bind to vitamin K-dependent protein growth-arrest-specific gene 6 (Gas6) that is structurally related to the anticoagulation factor Protein S.[4, 5] Binding of Gas6 induces receptor autophosphorylation and downstream signaling pathways that lead to cell proliferation, migration, or the prevention of apoptosis. These receptors are also involved in hematopoiesis, embryonic development, tumorigenesis, and regulation of testicular functions.[4]

Axl is expressed in most cell lines and adult tissues. Axl is found at highest levels in heart and skeletal muscle.[6]

Reagent

Recombinant Human Axl/Fc Chimrea is supplied as approximately 100 µg of protein lyophilized from a 0.2 µm filtered solution in phosphate buffered saline (PBS).

Preparation Instructions

Reconstitute the contents of the vial using sterile phosphate-buffered saline (PBS) containing at least 0.1% human serum albumin or bovine serum albumin. Prepare a stock solution of no less than 50 µg/ml.

Storage/Stability

Store at –20 °C. Upon reconstitution, store at 2 °C to 8 °C for one month. For extended storage, freeze in working aliquots. Repeated freezing and thawing is not recommended. Do not store in a frost-free freezer.

Product Profile

Recombinant Human Axl/Fc Chimera is measured by its ability to bind recombinant human Gas6.

Immobilized recombinant human Axl/Fc at 2 µg/ml (100 µl/well) binds recombinant human Gas6 with a linear range of 20 - 0.5 ng/ml in an ELISA assay.

Purity: > 90 % as determined by SDS-PAGE, visualized by silver stain.

Endotoxin level is < 0.1 ng/µg protein as determined by the LAL (Limulus amebocyte lysate) method.

References

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4. Crosier, K.E., and Crosier, P.S., New insights into the control of cell growth; the role of the Axl family. Pathology, **29**, 131 (1997).
5. Nagata, K., et al., Identification of the product of growth arrest-specific gene 6 as a common ligand for Axl, Sky, and Mer receptor tyrosine kinases. J. Biol. Chem., **271**, 30022 (1996).
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KAA 08/01

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