Human Axl Kinase Protein (ECD, His Tag)

Catalog Number: 10279-H08H



General Information

Gene Name Synonym:

ARK; JTK11; Tyro7; UFO

Protein Construction:

A DNA sequence encoding the extracellular domain of human AXL isoform 1 (AAB20305.1) extracellular domain (Met1-Pro449) was fused with a polyhistidine tag at the C-terminus.

Source: Human

Expression Host: HEK293 Cells

QC Testing

Purity: > 98 % as determined by SDS-PAGE

Bio Activity:

Label Recombinant Mouse GAS6 Protein (His Tag) ((Cat: 58026-M08H) with biotin. Immobilized Recombinant HumanAxl Kinase Protein (ECD, His Tag) (Cat: 10279-H08H) at 0.25 $\mu g/mL$ (100 $\mu L/well$) can bind biotinylated Recombinant Mouse GAS6 Protein, the EC50 is 1.3-3.9 ng/mL.

Endotoxin:

< 1.0 EU per μg of the protein as determined by the LAL method

Predicted N terminal: Glu 33

Molecular Mass:

The secreted recombinant human AXL consists of 428 amino acids after removal of the signal peptide and predicts a molecular mass of 46.5 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 60-70 kDa band due to glycosylation.

Formulation:

Lyophilized from sterile PBS, pH 7.4

Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Specific concentrations are included in the hardcopy of COA. Please contact us for any concerns or special requirements.

Usage Guide

Stability & Storage:

Samples are stable for twelve months from date of receipt at -20°C to -80°C.

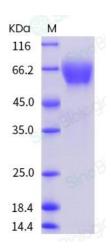
Store it under sterile conditions at -20°C to -80°C upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

Avoid repeated freeze-thaw cycles.

Reconstitution:

Detailed reconstitution instructions are sent along with the products.

SDS-PAGE:



Protein Description

Axl receptor tyrosine kinase, together with Tyro3 and Mer, constitute the TAM family of receptor tyrosine kinases. In the nervous system, Axl and its ligand Growth-arrest-specific protein 6 (Gas6) are expressed on multiple cell types. Axl functions in dampening the immune response, regulating cytokine secretion, clearing apoptotic cells and debris, and maintaining cell survival. Axl is upregulated in various disease states, such as in the cuprizone toxicity-induced model of demyelination and in multiple sclerosis (MS) lesions, suggesting that it plays a role in disease pathogenesis. Axl expression correlates with poor prognosis in several cancers. Axl mediates multiple oncogenic phenotypes and activation of these RTKs constitutes a mechanism of chemoresistance in a variety of solid tumors. Axl contributes to cell survival, migration, invasion, metastasis and chemosensitivity justify further investigation of AxI as novel therapeutic targets in cancer. The receptor tyrosine kinase AXL is thought to play a role in metastasis. The soluble AXL receptor as a therapeutic candidate agent for treatment of metastatic ovarian cancer. GAS6/AXL targeting as an effective strategy for inhibition of metastatic tumor progression in vivo.

References

- 1.Weinger JG, et al. (2011) Loss of the receptor tyrosine kinase Axl leads to enhanced inflammation in the CNS and delayed removal of myelin debris during Experimental Autoimmune Encephalomyelitis. J Neuroinflammation. 8: 49.
- 2.Linger RM, et al. (2010) Taking aim at Mer and Axl receptor tyrosine kinases as novel therapeutic targets in solid tumors. Expert Opin Ther Targets. 14(10): 1073-90.
- 3.Cavet ME, et al. (2010) Gas6-Axl pathway: the role of redox-dependent association of Axl with nonmuscle myosin IIB. Hypertension. 56(1): 105-11.