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Anti-LIV-1 / SLC39A6 Reference Antibody (ladiratuzumab vedotin)

Recombinant Antibody
Catalog # APR10163

Product Information

Application	Functional assay, Kinetics (SPR), Kinetics (BLI), FACS, E, FTA
Primary Accession	Q13433
Reactivity	Human
Clonality	ADC
Isotype	IgG1
Calculated MW	85047

Additional Information

Target/Specificity	LIV-1 / SLC39A6
Endotoxin Conjugation	MMAE
Expression system	CHO
Format	Purified monoclonal antibody supplied in PBS, pH6.0, without preservative.This antibody is purified through a protein A column.

Protein Information

Name	SLC39A6 (HGNC:18607)
Synonyms	LIV1, ZIP6
Function	Zinc-influx transporter which plays a role in zinc homeostasis and in the induction of epithelial-to-mesenchymal transition (EMT) (PubMed:12839489, PubMed:18272141, PubMed:21422171, PubMed:23919497, PubMed:27274087, PubMed:34394081). When associated with SLC39A10, the heterodimer formed by SLC39A10 and SLC39A6 mediates cellular zinc uptake to trigger cells to undergo epithelial- to- mesenchymal transition (EMT) (PubMed:27274087). The SLC39A10-SLC39A6 heterodimer also controls NCAM1 phosphorylation and its integration into focal adhesion complexes during EMT (By similarity). Zinc influx inactivates GSK3B, enabling unphosphorylated SNAI1 in the nucleus to down-regulate adherence genes such as CDH1, causing loss of cell adherence (PubMed:23919497). In addition, the SLC39A10-SLC39A6 heterodimer plays an essential role in initiating mitosis by importing zinc into cells to initiate a pathway resulting in the onset of mitosis (PubMed:32797246). Participates in the T-cell receptor signaling regulation by mediating cellular zinc uptake into activated lymphocytes

(PubMed:21422171, PubMed:30552163, PubMed:34394081). Regulates the zinc influx necessary for proper meiotic progression to metaphase II (MII) that allows the oocyte-to-egg transition (PubMed:25143461).

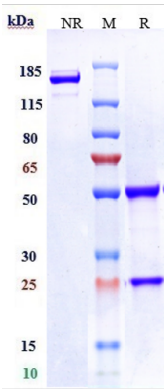
Cellular Location

Cell membrane; Multi-pass membrane protein. Cell projection, lamellipodium membrane; Multi-pass membrane protein. Membrane raft; Multi-pass membrane protein. Apical cell membrane {ECO:0000250|UniProtKB:Q4V887} Note=Localizes to lipid rafts in T cells and is recruited into the immunological synapse in response to TCR stimulation (PubMed:34394081) In the choroid plexus is limited to the apical membrane in epithelial cells (By similarity). {ECO:0000250|UniProtKB:Q4V887, ECO:0000269|PubMed:34394081}

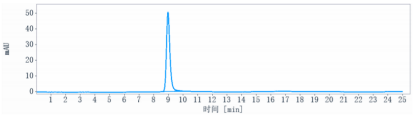
Tissue Location

Highly expressed in the breast, prostate, placenta, kidney, pituitary and corpus callosum (PubMed:12839489). Weakly expressed in heart and intestine. Also highly expressed in cells derived from an adenocarcinoma of the cervix and lung carcinoma (PubMed:12839489).

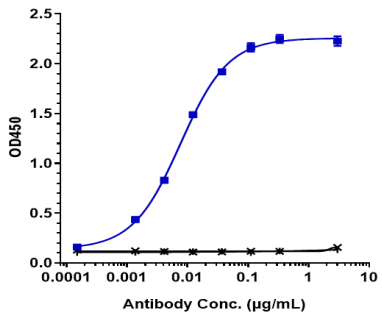
Images



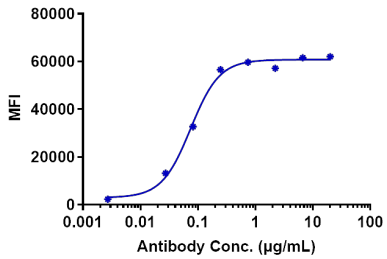
Anti-LIV-1 / SLC39A6 Reference Antibody (Ladiratuzumab vedotin) on SDS-PAGE under reducing (R) condition. The purity of the protein is greater than 95%.



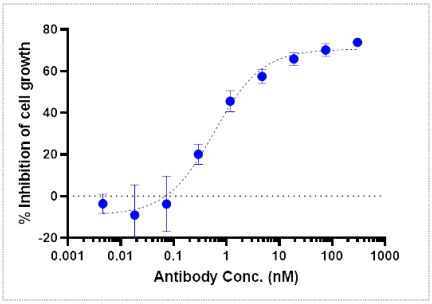
The purity of Anti-LIV-1 / SLC39A6 Reference Antibody (Ladiratuzumab vedotin) is 98.2%, determined by SEC-HPLC.



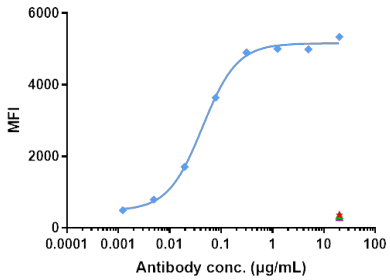
Immobilized human LIV 1, His Tag at 2 ug/mL can bind Anti-LIV-1 / SLC39A6 Reference Antibody (Ladiratuzumab vedotin), EC50 is 0.007652 ug/mL.



Human LIV1 CHOS cells were stained with Anti-LIV-1 / SLC39A6 Reference Antibody (Ladiratuzumab vedotin) and negative control protein respectively, washed and then followed by PE and analyzed with FACS, EC50 is 0.07456 ug/mL.



The killing ratio Ladiratuzumab vedotin by Human LIV-1 HEK293 Cell Line increased with the increase of antibody concentration, and the killing Rate (%) reached 74%



Cynomolgus / Rhesus Macaque LIV-1 HEK293 Cell Line were stained with Anti-LIV-1 / SLC39A6 Reference Antibody (Ladiratuzumab vedotin) and negative control protein respectively, washed and then followed by PE and analyzed with FACS, The EC50 is 0.04 ug/mL.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.