For Research Use Only

ALR Recombinant antibody

Catalog Number:84972-4-RR



Basic Information

Catalog Number: GenBank Accession Number:

84972-4-RR BC028348 GeneID (NCBI): Size: CloneNo.:

Full Name:

100ul , Concentration: 1000 $\mu g/ml$ by 2671 Nanodrop: **UNIPROT ID:** Recommended Dilutions: P55789

Isotype: growth factor, augmenter of liver

IgG regeneration Immunogen Catalog Number: Calculated MW: AG1840 15 kDa. 23 kDa

> Observed MW: 23-25 kDa

Applications

Tested Applications: WB, IHC, FC (Intra), ELISA

Rabbit

Species Specificity: human, mouse, rat

Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate

buffer pH 6.0

Purification Method:

Protein A purification

242557G3

WB: 1:500-1:2000 IHC: 1:250-1:1000

FC (Intra): 0.25 ug per 10^6 cells in a

100 µl suspension

Positive Controls:

WB: A375 cells, A431 cells, HepG2 cells, mouse liver

tissue, rat liver tissue

IHC: human liver cancer tissue, human colon cancer

FC (Intra): HepG2 cells,

Background Information

GFER (FAD-linked sulfhydryl oxidase) is also named as ALR, HERV 1, HPO. It plays an important role in the disulfide relay system (DRS) in human mitochondria. The GFER gene codes for 2 distinct isoforms that are probably synthesized from the same mRNA with the use of different initiation codons. The long isoform (205 amino acids, 23/21 kD) is located mainly in the mitochondrial intermembrane space and exists under nonreducing and nondenaturing conditions as a homodimer and a heterodimer. The shorter isoform (125 amino acids, 15 kD), which lacks 80 amino acids at its N terminus compared to the longer isoform, is present predominantly in the nucleus (PMID: 19409522, 24880092, 21152698).

Storage

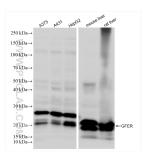
Store at -20°C. Stable for one year after shipment.

PBS with 0.02% sodium azide and 50% glycerol, pH7.3

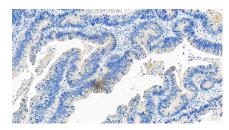
Aliquoting is unnecessary for -20°C storage

*** 20ul sizes contain 0.1% BSA

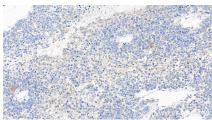
Selected Validation Data



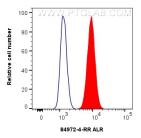
Various lysates were subjected to SDS PAGE followed by western blot with 84972-4-RR (GFER antibody) at dilution of 1:1000 incubated at room temperature for 1.5 hours.



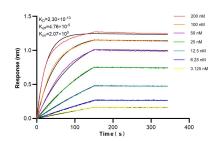
Immunohistochemical analysis of paraffinembedded human colon cancer tissue slide using 84972-4-RR (ALR antibody) at dilution of 1:500 (under 20x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffinembedded human liver cancer tissue slide using 84972-4-RR (ALR antibody) at dilution of 1:500 (under 20x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



1x10^6 HepG2 cells were intracellularly stained with 0.25 ug ALR Recombinant antibody (84972-4-RR, Clone:242557G3) and CoraLite®488-Conjugated Goat Anti-Rabbit 1gG(H+L) (SA00013-2) (red), or 0.25 ug Rabbit 1gG Isotype Control RecAb (98136-1-RR, Clone: 240953C9) (blue). Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C).



Biolayer interferometry (BLL) kinetic assays of 84972-4-RR against Human ALR were performed. The affinity constant is 0.23 nM.