For Research Use Only

CHI3L1/YKL40 Recombinant antibody

Catalog Number:83685-4-RR



Purification Method:

IHC 1:200-1:800

IF/ICC 1:125-1:500

Basic Information

Catalog Number: GenBank Accession Number:

83685-4-RR BC008568 Protein A purfication GeneID (NCBI): CloneNo.: Size:

100ul, Concentration: 1000 ug/ml by 1116 240691F11 Nanodrop: **UNIPROT ID:** Recommended Dilutions: WB 1:2000-1:10000

P36222 Rabbit Full Name:

Isotype: chitinase 3-like 1 (cartilage

IgG glycoprotein-39) Immunogen Catalog Number: Calculated MW: AG33123 383 aa. 43 kDa Observed MW:

40-43 kDa

Applications

Tested Applications:

WB, IHC, IF/ICC, FC (Intra), ELISA

Species Specificity:

Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0

Positive Controls:

WB: THP-1 cells,

IHC: human ovary cancer tissue,

IF/ICC: THP-1 cells,

Background Information

Chitinase 3-like-1 (CHI3L1/YKL-40/CGP-39/GP-39/hCGP-39) is a protein secreted from restricted cell types including colonic epithelial cells (CECs) and macrophages. CHI3L1 is an inflammation-associated molecule, and its expression is enhanced in persons with colitis and colon cancer. CHI3L1 is a 40 kDa protein and is produced by restricted cell types, including colonic epithelial cells (CECs) and macrophages. CHI3L1 can be detected in the Golgi apparatus and the endoplasmic reticulum, but its major sites of action seems to be extracellular as a secreted protein. (PMID:21763261)

Storage

Storage:

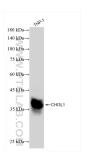
Store at -20°C. Stable for one year after shipment.

Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage *** 20ul sizes contain 0.1% BSA

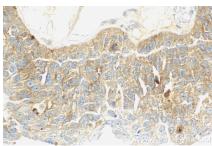
Selected Validation Data



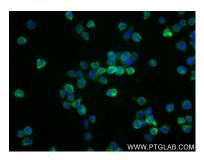
THP-1 cells were subjected to SDS PAGE followed by western blot with 83685-4-RR (CHI3L1 antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours.



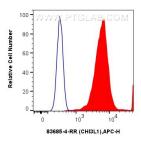
Immunohistochemical analysis of paraffinembedded human ovary cancer tissue slide using 83685-4-RR (CHI3L1/YKL40 antibody) at dilution of 1:400 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



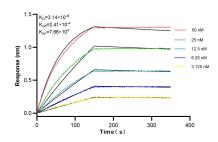
Immunohistochemical analysis of paraffinembedded human ovary cancer tissue slide using 83685-4-RR (CHI3L1/YKL40 antibody) at dilution of 1:400 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (4% PFA) fixed THP-1 cells using CHI3L1 antibody (83685-4-RR, Clone: 240691F11) at dilution of 1:250 and CoraLite®488-Conjugated Affini Pure Goat Anti-Rabbit IgG(H+L) (SA00013-2).



1x10^6 THP-1 cells were intracellularly stained with 0.25 ug CHi3L1 Recombinant antibody (83685-4-RR, Clone:240691F11) and APC-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L)(red), or 0.25 ug Isotype Control (blue). Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C).



Biolayer interferometry (BLI) kinetic assays of 83685-4-RR against Human CHI3L1 were performed. The affinity constant is 3.14 nM.