For Research Use Only

CoraLite® Plus 488-conjugated LEF1 Polyclonal antibody

Catalog Number:CL488-28540

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Antibodies | ELISA kits | Proteins
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Basic Information

Catalog Number:
CL488-28540

Size:
100ul , Concentration: 1000 ug/ml by Nanodrop;

Source:
Rabbit

Isotype:
IgG

Immunogen Catalog Number:
AG29841

GenBank Accession Number:
BC050632

GeneID (NCBI):
51176

ENSEMBL Gene ID:
ENSG00000138795

UNIPROT ID:
Q9UJU2

Full Name:
lymphoid enhancer-binding factor 1

Calculated MW:
37 kDa

Observed MW:
50 kDa

Purification Method:
Antigen affinity purification

Recommended Dilutions:
FC (Intra): 0.40 ug per 10^6 cells in a 100 µl suspension

Excitation/Emission maxima wavelengths:
493 nm / 522 nm

Applications

Tested Applications:
FC (Intra)

Species Specificity:
human

Positive Controls:

FC (Intra) : HepG2 cells, MOLT-4 cells

Background Information

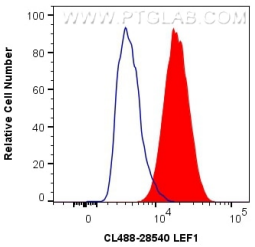
Lymphoid enhancer-binding factor 1(LEF1) belongs to a family of regulatory protein share homology with high mobility group protein-1, and it's a nuclear protein exprssed in pre-B and T cells. LEF1 has a role in the Wnt signaling pathway and hair cell differentiation and follicle morphogenesis. LEF1 exists as seven isoforms and we detects three isoforms with MW 44 kDa, 36 kDa and 23 kDa. Together with CTNNB1 and EP300, LEF1 activates transcription of target genes. Isoform 5 transcriptionally activates the fibronectin promoter, binds to and represses transcription from the E-cadherin promoter in a CTNNB1-independent manner, and is involved in reducing cellular aggregation and increasing cell migration of pancreatic cancer cells. Isoform 1 transcriptionally activates MYC and CCND1 expression and enhances proliferation of pancreatic tumor cells. MECs can give rise to seven cell types of the SAE and SMGs following severe airway injury. MECs progressively adopted a basal cell phenotype on the SAE and established lasting progenitors capable of further regeneration following reinjury. MECs activate Wnt-regulated transcription factors (Lef-1/TCF7) following injury and Lef-1 induction in cultured MECs promoted transition to a basal cell phenotype. Surprisingly, dose-dependent MEC conditional activation of Lef-1in vivopromoted self-limited airway regeneration in the absence of injury. Thus, modulating the Lef-1 transcriptional program in MEC-derived progenitors may have regenerative medicine applications for lung diseases. (https://doi.org/10.1016/j.stem.2018.03.017) The phosphorylation may affects LEF1 protein's theoretical molecular weight when tested.40-70 kD bands have also been reported (PMID:22261717;17063141).

Storage

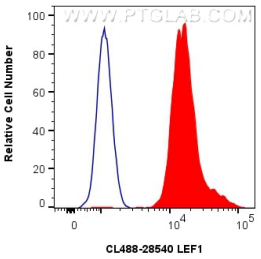
Storage:
Store at -20°C. Avoid exposure to light. Stable for one year after shipment.
Storage Buffer:
PBS with 50% glycerol, 0.05% Proclin300, 0.5% BSA, pH7.3
Aliquoting is unnecessary for -20°C storage

For technical support and original validation data for this product please contact:
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)
E: proteintech@ptglab.com
W: ptglab.com

Selected Validation Data



1X10^6 HepG2 cells were intracellularly stained with 0.4 ug CoraLite® Plus 488 Anti-Human LEF1 (CL488-28540) (red), or 0.4 ug Isotype Control. Cells were fixed and permeabilized with Transcription Factor Staining Buffer Kit (PF00011).



1x10^6 MOLT-4 cells were intracellularly stained with 0.4 ug CoraLite® Plus 488-conjugated LEF1 Polyclonal antibody (CL488-28540)(red), or 0.4 ug CoraLite® Plus 488-conjugated Rabbit IgG control Rabbit PolyAb (CL488-30000) (blue). Cells were fixed and permeabilized with Transcription Factor Staining Buffer Kit (PF00011).