For Research Use Only

LEF1 Polyclonal antibody

Catalog Number:14972-1-AP Featured Product 39 Publications

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Basic Information

Catalog Number:
14972-1-AP

Size:
700 μg/ml

Source:
Rabbit

Isotype:
IgG

Immunogen Catalog Number:
AG6882

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:
50-55 kDa, 65 kDa

Purification Method:
Antigen affinity purification

Recommended Dilutions:
WB 1:1000-1:4000
IP 0.5-4.0 ug for 1.0-3.0 mg of total protein lysate

Applications

Tested Applications:
IP, WB, ELISA

Cited Applications:
WB, IP, IF, IHC

Species Specificity:
human

Cited Species:
human, rat, mouse

Positive Controls:

WB : Jurkat cells, COLO 320 cells, NCCIT cells

IP : SW 1990 cells,

Background Information

Lymphoid enhancer-binding factor 1(LEF1) belongs to a family of regulatory proteins that share homology with high mobility group protein-1, and it's a nuclear protein expressed in pre-B and T cells. LEF1 has a role in the Wnt signaling pathway hair cell differentiation and follicle morphogenesis. 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 the 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 promotes 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 affect the LEF1 protein's theoretical molecular weight when tested.40-70 kD bands have also been reported (PMID: 22261717; 17063141).

Notable Publications

Author	Pubmed ID	Journal	Application
Y Gong	25429621	Cell Death Dis	
Jia Peng	25394221	PLoS One	WB
Ziling Wang	32565825	Stem Cells Int	WB

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

For technical support and original validation data for this product please contact:
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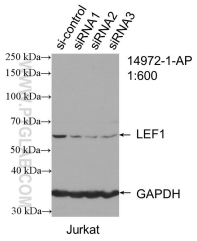
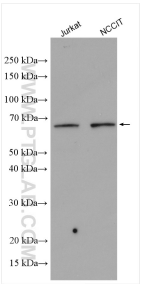
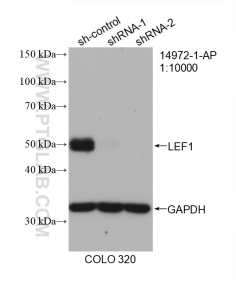
Selected Validation Data



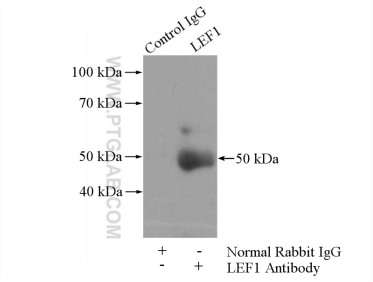
WB result of LEF1 antibody (14972-1-AP; 1:600; incubated at room temperature for 1.5 hours) with sh-Control and sh-LEF1 transfected Jurkat cells.



Various lysates were subjected to SDS PAGE followed by western blot with 14972-1-AP (LEF1 antibody) at dilution of 1:2000 incubated at room temperature for 1.5 hours.



WB result of LEF1 antibody (14972-1-AP; 1:10000; incubated at room temperature for 1.5 hours) with sh-Control and sh-LEF1 transfected COLO 320 cells.



IP result of anti-LEF1 (IP:14972-1-AP, 4ug; Detection:14972-1-AP 1:300) with SW 1990 cells lysate 2400ug.