

LEF1 Recombinant monoclonal antibody

Catalog Number: 88437-1-RR

Basic Information

Catalog Number: 88437-1-RR	GenBank Accession Number: BC050632	Purification Method: Protein A purification
Source: Rabbit	GeneID (NCBI): 51176	CloneNo.: 260857E6
Isotype: IgG	ENSEMBL Gene ID: ENSG00000138795	Recommended Dilutions: WB: 1:5000-1:50000
Immunogen Catalog Number: AG6882	UNIPROT ID: Q9UJU2	
	Full Name: Lymphoid enhancer-binding factor 1	
	Calculated MW: 37 kDa	
	Observed MW: 50 kDa	

Applications

Tested Applications: WB, ELISA	Positive Controls:
Species Specificity: human, mouse, rat	WB : Jurkat cells, COLO 320 cells, mouse thymus tissue, rat thymus tissue

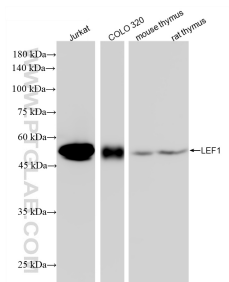
Background Information

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 expressed 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-1 in vivo promoted 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. Stable for one year after shipment.
Storage Buffer:
PBS with 0.02% sodium azide and 50% glycerol, pH7.3
Aliquoting is unnecessary for -20°C storage

Selected Validation Data



Various lysates were subjected to SDS PAGE followed by western blot with 88437-1-RR (LEF1 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.