For Research Use Only

## MultiPro<sup>TM</sup> 5CFLX Anti-Human LEF1 (Polyclonal)



Catalog Number: G14972-1-5C

**Basic Information** 

Catalog Number:

G14972-1-5C

10ug, Concentration: 500ug/mL by Bradford method using BSA as the

standard; Source:

Rabbit Isotype

Immunogen Catalog Number:

AG6882

GenBank Accession Number:

BC050632 GeneID (NCBI):

51176 ENSEMBL Gene ID:

ENSG00000138795 **UNIPROT ID:** 

Q9UJU2 Full Name:

MultiPro<sup>TM</sup> 5CFLX Anti-Human LEF1

(Polyclonal)

Conjugate: 5CFLX

Full Oligo Sequence:

CGGAGATGTGTATAAGAGACAGCATA CAGGCTGACAACCCATATAAGAAA

Barcode Sequence: CATACAGGCTGACAA

**Applications** 

**Tested Applications:** Single Cell (Intra)

Species Specificity:

Human

## **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. 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

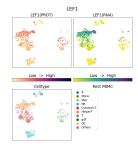
Storage:

2-8°C

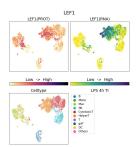
Storage Buffer:

PBS with 1mM EDTA and 0.09% sodium azide

## Selected Validation Data



G14972-1-5C was used to stain Resting PBMC and analyzed with 10x Genomics Gene Expression Flex with Feature Barcodes and Multiplexing kit with Fix-Stain protocol.



G14972-1-5C was used to stain PBMC under 4hr LPS + TI treatment and analyzed with 10x Genomics Gene Expression Flex with Feature Barcodes and Multiplexing kit with Fix-Stain protocol.