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Anti-CD47 Reference Antibody (lemzoparlimab)

Recombinant Antibody
Catalog # APR10255

Product Information

Application	Functional assay, Kinetics (SPR), Kinetics (BLI), FACS, E, FTA
Primary Accession	Q08722
Reactivity	Human
Clonality	Monoclonal
Isotype	IgG4
Calculated MW	35214

Additional Information

Target/Specificity	CD47
Endotoxin	
Conjugation	Unconjugated
Expression system	CHO
Format	Purified monoclonal antibody supplied in PBS, pH6.0, without preservative.This antibody is purified through a protein A column.

Protein Information

Name	CD47
Synonyms	MER6
Function	Adhesive protein that mediates cell-to-cell interactions (PubMed: 11509594, PubMed:15383453). Acts as a receptor for thrombospondin THBS1 and as modulator of integrin signaling through the activation of heterotrimeric G proteins (PubMed:19004835, PubMed:7691831, PubMed:8550562). Involved in signal transduction, cardiovascular homeostasis, inflammation, apoptosis, angiogenesis, cellular self-renewal, and immunoregulation (PubMed:11509594, PubMed:15383453, PubMed:19004835, PubMed:27742621, PubMed:32679764, PubMed:7691831, PubMed:8550562). Plays a role in modulating pulmonary endothelin EDN1 signaling (PubMed:27742621). Modulates nitrous oxide (NO) signaling, in response to THBS1, hence playing a role as a pressor agent, supporting blood pressure (By similarity). Plays an important role in memory formation and synaptic plasticity in the hippocampus (By similarity). Receptor for SIRPA, binding to which prevents maturation of immature dendritic cells and inhibits cytokine production by mature dendritic cells (PubMed:11509594). Interaction with SIRPG mediates cell-cell adhesion, enhances superantigen-dependent T-cell-mediated proliferation and costimulates T-cell activation

(PubMed:15383453). Positively modulates FAS-dependent apoptosis in T-cells, perhaps by enhancing FAS clustering (By similarity). Plays a role in suppressing angiogenesis and may be involved in metabolic dysregulation during normal aging (PubMed:32679764). In response to THBS1, negatively modulates wound healing (By similarity). Inhibits stem cell self- renewal, in response to THBS1, probably by regulation of the stem cell transcription factors POU5F1/OCT4, SOX2, MYC/c-Myc and KLF4 (By similarity). May play a role in membrane transport and/or integrin dependent signal transduction (PubMed:7691831). May prevent premature elimination of red blood cells (By similarity).

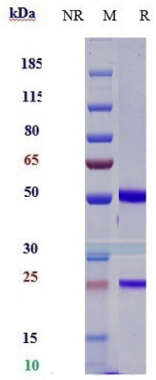
Cellular Location

Cell membrane; Multi-pass membrane protein

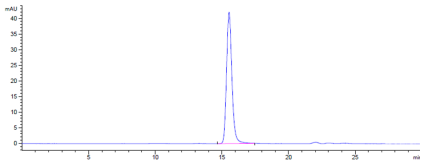
Tissue Location

Very broadly distributed on normal adult tissues, as well as ovarian tumors, being especially abundant in some epithelia and the brain. Macrophages (PubMed:39121194)

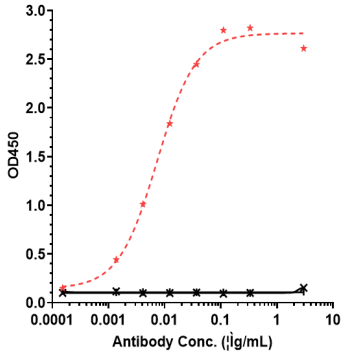
Images



Anti-CD47 Reference Antibody (lemzoparlimab) on SDS-PAGE under reducing (R) condition. The purity of the protein is greater than 95%.

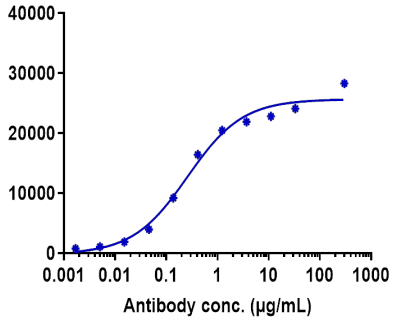


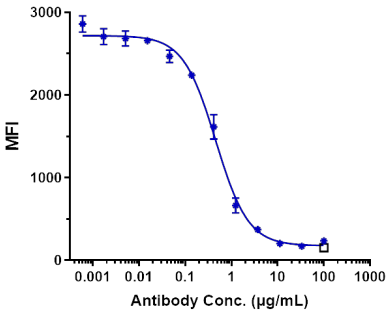
The purity of Anti-CD47 Reference Antibody (lemzoparlimab) is 100%, determined by SEC-HPLC.



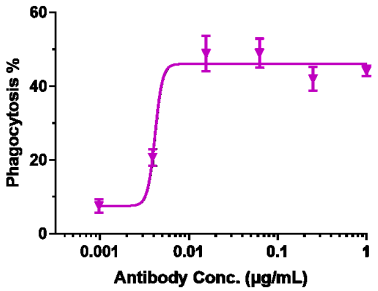
Immobilized Recomvinant human CD47 (c His) at1.5 ug/mL can bind Anti-CD47 Reference Antibody (lemzoparlimab), EC50=0.0163 ug/mL.

PANC-1 cells were stained with Anti-CD47 Reference Antibody (lemzoparlimab) and negative control protein respectively, washed and then followed by PE and analyzed with FACS, EC50=0.265 ug/mL.





Anti-CD47 Reference Antibody (lemzoparlimab) FACS Blocking was evaluated using CCRF-CEM. The IC50 was approximately 0.4557 ug/mL.



The phagocytosis ratio lemzoparlimab by CCRF-CEM increased with the increase of antibody concentration, and the phagocytosis Rate (%) reached 43%.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.