

# TMEM53 Recombinant antibody

Catalog Number: 83554-3-RR

## Basic Information

**Catalog Number:**

83554-3-RR

**Size:**

1000 µg/ml

**Source:**

Rabbit

**Isotype:**

IgG

**Immunogen Catalog Number:**

AG21321

**GenBank Accession Number:**

BC064520

**GeneID (NCBI):**

79639

**UNIPROT ID:**

Q6P2H8

**Full Name:**

transmembrane protein 53

**Calculated MW:**

277 aa, 32 kDa

**Purification Method:**

Protein A purification

**CloneNo.:**

240511C3

**Recommended Dilutions:**

IF/ICC 1:200-1:800

## Applications

**Tested Applications:**

IF/ICC, FC (Intra), ELISA

**Species Specificity:**

human

**Positive Controls:**

IF/ICC : A549 cells,

## Background Information

TMEM53 was initially described as a nuclear envelope transmembrane (NET) protein because of its nuclear envelope localization. Research has found that TMEM53 functionality does not rely on viral RNA binding or canonical IFN responses, and TMEM53 exerts an antiviral effect on other bat HKU2-related CoVs in a species-specific manner. Therefore, TMEM53 may be a potential therapeutic target for HKU2-related CoV infections and useful for preparing for future outbreaks of this viral species. (PMID: 37584551)

## Storage

**Storage:**

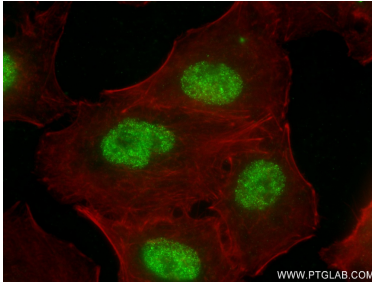
Store at -20°C. Stable for one year after shipment.

**Storage Buffer:**

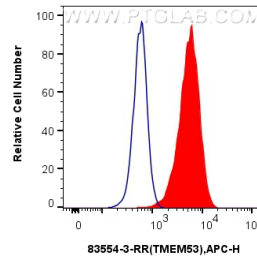
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

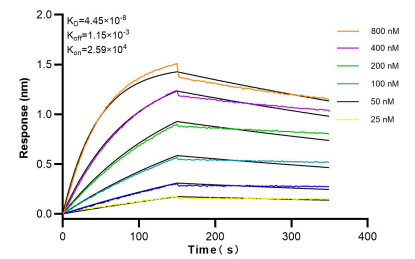
## Selected Validation Data



Immunofluorescent analysis of (4% PFA) fixed A549 cells using TMEM53 antibody (83554-3-RR, Clone: 240511C3) at dilution of 1:400 and CoraLite®488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L) (SA00013-1), CL594-Phalloidin (red).



$1 \times 10^6$  A549 cells were intracellularly stained with 0.25  $\mu$ g TMEM53 Recombinant antibody (83554-3-RR, Clone:240511C3) and APC-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) (red), or 0.25  $\mu$ g Isotype Control (blue). Cells were fixed and permeabilized with Transcription Factor Staining Buffer Kit (PF00011).



Biolayer interferometry (BLI) kinetic assays of 83554-3-RR against Human TMEM53 were performed. The affinity constant is 44.5 nM.