For Research Use Only

CoraLite® Plus 488-conjugated Piezo1 (extracellular domain) Recombinant antibody



Catalog Number: CL488-82625-4

Basic Information

Catalog Number: CL488-82625-4 Concentration:

1000 ug/ml Source: Rabbit

Immunogen Catalog Number:

AG7791

Isotype:

GenBank Accession Number:

BC008073 GeneID (NCBI): 9780 **UNIPROT ID:**

Q92508

member A

Full Name: family with sequence similarity 38,

Calculated MW:

286 kDa Observed MW: 233-286 kDa

Purification Method:

Protein A purification

CloneNo.: 4B15

Recommended Dilutions:

IF/ICC: 1:50-1:500

Excitation/Emission maxima wavelengths:

493 nm / 522 nm

Applications

Tested Applications:

Species Specificity:

human

Positive Controls:

IF/ICC: THP-1 cells,

Background Information

Mechanotransduction, the conversion of mechanical force into biological signals, is a fundamental physiologic process of mammalian cells that influences many critical processes including embryonic development, tactile, pain, and auditory sensation, regulation of vascular tone, flow sensing in the kidney, and muscle and tendon stretch. FAM38A, also known as Piezo1, has recently been identified as a mechanotransduction protein that gets involved in mechanosensation and stretch-activated cation channel activation. Piezo1 also plays a key role in epithelial cell adhesion by maintaining integrin activation through R-Ras recruitment to the ER. Mutations in the gene encoding Piezo1 are associated with hereditary xerocytosis. Piezo1 also regulates extrusion to maintain homeostatic epithelial cell numbers. This antibody was raised against the extracellular domain of human Piezo1. (PMID: 20016066, 28416610)

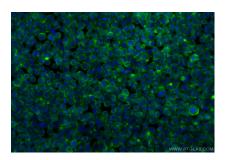
Storage

Store at -20°C. Avoid exposure to light. Stable for one year after shipment.

PBS with 50% glycerol, 0.05% Proclin300, 0.5% BSA, pH7.3

Aliquoting is unnecessary for -20°C storage

Selected Validation Data



Immunofluorescent analysis of (4% PFA) fixed THP-1 cells using Coralite® Plus 488 Piezo1 (extracellular domain) antibody (CL488-82625-4, Clone: 4B15) at dilution of 1:200.