For Research Use Only

## CoraLite® Plus 488-conjugated PGAM5 Polyclonal antibody

www.ptglab.com

Catalog Number: CL488-28445

**Basic Information** 

Catalog Number: GenBank Accession Number:

CL488-28445 BC008196 GeneID (NCBI): Size: 100ul, Concentration: 1000 ug/ml by 192111

Nanodrop; **UNIPROT ID:** 

Q96HS1 Source Rabbit Full Name:

phosphoglycerate mutase family Isotype

IgG member 5 Immunogen Catalog Number: Calculated MW: AG28195 32 kDa

> Observed MW: 32 kDa

Species Specificity:

**Purification Method:** 

Antigen affinity purification Recommended Dilutions: IF/ICC 1:50-1:500

Excitation/Emission maxima wavelengths:

493 nm / 522 nm

**Applications** 

**Tested Applications:** IF/ICC, FC (Intra)

human

Positive Controls:

IF/ICC: MCF-7 cells,

## **Background Information**

Phosphoglycerate mutase 5 (PGAM5) is a mitochondrial Serine (Ser)/Threonine (Thr) phosphatase normally located in the inner mitochondrial membrane. Upon mitochondrial dysfunction, PGAM5 recruits and dephosphorylates Drp1 at Ser-637, triggers its GTPase activity and promotes mitochondrial fission. PGAM5 regulates mitophagy by stabilizing PINK1 under stress conditions, which recruits E3 ubiquitin ligase PARKIN for degradation of the damaged mitochondria. PGAM5 can be cleaved and released to the cytoplasm through PARKIN, which activates Wnt signaling and induces mitochondrial biogenesis (PMID: 32439975). PGAM5 has 2 isoforms with the molecular mass of 28 and

Storage

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

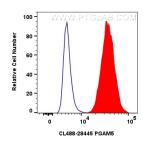
PBS with 50% Glycerol, 0.05% Proclin300, 0.5% BSA, pH 7.3.

Aliquoting is unnecessary for -20°C storage

## Selected Validation Data



Immunofluorescent analysis of (4% PFA) fixed MCF-7 cells using CoraLite® Plus 488 PGAM5 antibody (CL488-28445) at dilution of 1:200, CL594-Phalloidin (red).



1x10^6 MCF-7 cells were intracellularly stained with 0.8 ug Coralite® Plus 488 Pgam5 Polyclonal Antibody (CL488-28445)(red), or 0.8 ug Coralite® Plus 488-conjugated Rabbit IgG control Rabbit PolyAb (CL488-30000) (blue). Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C).