

CoraLite® Plus 488-conjugated PGAM5 Polyclonal antibody

Catalog Number: **CL488-28445**

Basic Information

Catalog Number:

CL488-28445

Size:

1000 µg/ml

Source:

Rabbit

Isotype:

IgG

Immunogen Catalog Number:

AG28195

GenBank Accession Number:

BC008196

GeneID (NCBI):

192111

UNIPROT ID:

Q96HS1

Full Name:phosphoglycerate mutase family
member 5**Calculated MW:**

32 kDa

Observed MW:

32 kDa

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)

Species Specificity:

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 32 kDa.

Storage

Storage:

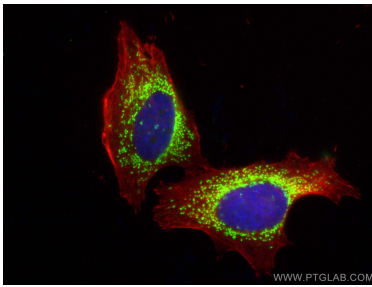
Store at -20°C. Avoid exposure to light. Stable for one year after shipment.

Storage Buffer:

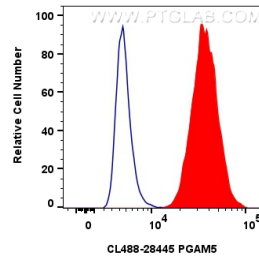
PBS with 50% Glycerol, 0.05% Proclin300, 0.5% BSA, pH 7.3.

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).



1x10⁶ 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).