

CoraLite®488-conjugated PARP1 Monoclonal antibody

Catalog Number: **CL488-66520**

Basic Information

Catalog Number: CL488-66520	GenBank Accession Number: BC037545	Purification Method: Protein G purification
Size: 1000 µg/ml	GeneID (NCBI): 142	CloneNo.: 1D7D4
Source: Mouse	UNIPROT ID: P09874	Recommended Dilutions: IF-P 1:50-1:500 IF/ICC 1:800-1:3200
Isotype: IgG1	Full Name: poly (ADP-ribose) polymerase 1	Excitation/Emission maxima wavelengths: 491 nm / 516 nm
Immunogen Catalog Number: AG19173	Calculated MW: 1014 aa, 113 kDa	

Applications

Tested Applications: IF-P, FC (Intra)	Positive Controls: IF-P : human lung cancer tissue, Neuro-2a cells
Species Specificity: human, mouse	IF/ICC : Neuro-2a cells,

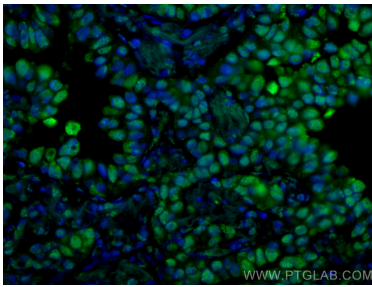
Background Information

PARP1 (poly(ADP-ribose) polymerase 1) is a nuclear enzyme catalyzing the poly(ADP-ribosyl)ation of many key proteins in vivo. The normal function of PARP1 is the routine repair of DNA damage. Activated by DNA strand breaks, the PARP1 is cleaved into an 85 to 89-kDa COOH-terminal fragment and a 24-kDa NH2-terminal peptide by caspases during the apoptotic process. The appearance of PARP fragments is commonly considered as an important biomarker of apoptosis. In addition to caspases, other proteases like calpains, cathepsins, granzymes and matrix metalloproteinases (MMPs) have also been reported to cleave PARP1 and gave rise to fragments ranging from 42-89-kD. This antibody was generated against the N-terminal region of human PARP1 and it recognizes the full-length as well as the cleavage of the PARP1.

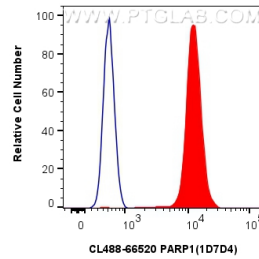
Storage

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

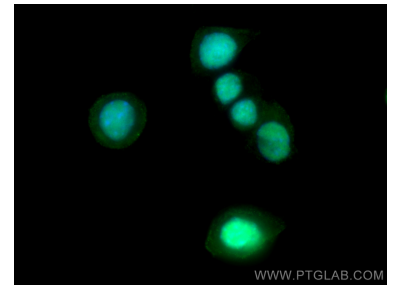
Selected Validation Data



Immunofluorescent analysis of (4% PFA) fixed human lung cancer tissue using CoraLite®488 PARP1 antibody (CL488-66520, Clone: 1D7D4) at dilution of 1:200.



1X10⁶ Jurkat cells were intracellularly stained with 0.4 ug CoraLite®488 Anti-Human PARP1 (CL488-66520, Clone:1D7D4) (red), or 0.4 ug CoraLite® Plus 488 Mouse IgG1 Isotype Control (MOPC-21) (CL488-65124, Clone: MOPC-21) (blue). Cells were fixed and permeabilized with True-Nuclear Transcription Factor Buffer Set.



Immunofluorescent analysis of (4% PFA) fixed Neuro-2a cells using CoraLite®488 PARP1 antibody (CL488-66520, Clone: 1D7D4) at dilution of 1:1600.