

# CoraLite® Plus 488-conjugated HSP70 Monoclonal antibody

Catalog Number: **CL488-66183**

## Basic Information

**Catalog Number:**

CL488-66183

**Size:**

1000 µg/ml

**Source:**

Mouse

**Isotype:**

IgG1

**Immunogen Catalog Number:**

AG19111

**GenBank Accession Number:**

BC009322

**GeneID (NCBI):**

3303

**UNIPROT ID:**

PODMV8

**Full Name:**

heat shock 70kDa protein 1A

**Calculated MW:**

70 kDa

**Observed MW:**

65-70 kDa

**Purification Method:**

Protein G purification

**CloneNo.:**

4E7E5

**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, mouse, rat, yeast

**Positive Controls:**

IF/ICC : HEK-293 cells,

## Background Information

HSPA1A, collectively known as HSP70 (also referred to HSP72), is a stress-inducible member of heat-shock protein 70 (HSP70) proteins which are highly conserved chaperons implicated in protein folding, protein refolding, protein transport, and protein targeting. Encoded by two closely linked, intronless and stress-inducible genes, HSPA1A and HSPA1B differ by only two amino acids and are believed to be fully interchangeable proteins. HSPA1A is a cytosol nuclear protein able to translocate between cytoplasm and nucleus. Generally, HSPA1A is thought to be expressed in unstressed normal cells at low or undetectable levels. Expression of HSPA1A protein can be highly activated by various stressful stimuli. Significant up-regulation of HSPA1A has been found in various tumors. Recently it has been reported that HSPA1A can be constitutively expressed in selected cell types. HSP70 is also used as exosomal marker. This antibody well recognized the endogenous HSP70 protein in multiple cell lines. (21373891)

## Storage

**Storage:**

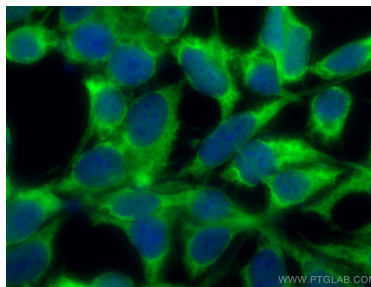
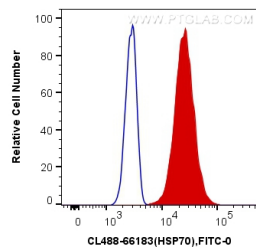
Store at -20°C. Avoid exposure to light. Stable for one year after shipment.

**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



1X10<sup>6</sup> HeLa cells were intracellularly stained with 0.4 ug CoraLite® Plus 488 Anti-Human HSP70 (CL488-66183, Clone:4E7E5) (red), or 0.4 ug Control Antibody. Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C).

Immunofluorescent analysis of (-20°C Ethanol) fixed HEK-293 cells using CoraLite® Plus 488 HSP70 antibody (CL488-66183, Clone: 4E7E5 ) at dilution of 1:200.