

CoraLite®555-conjugated HSP70 Monoclonal antibody

Catalog Number: CL555-66183

Basic Information

Catalog Number:

CL555-66183

Concentration:

1000 ug/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

FC (Intra): 0.40 ug per 10⁶ cells in a 100 µl suspension**Excitation/Emission maxima wavelengths:**

557 nm / 570 nm

Applications

Tested Applications:

IF/ICC, FC (Intra)

Species Specificity:

human, mouse, rat, yeast

Positive Controls:

IF/ICC : HeLa cells,

FC (Intra) : HeLa 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:

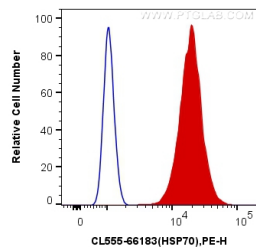
Store at -20°C. Avoid exposure to light. Stable for one year after shipment.

Storage Buffer:

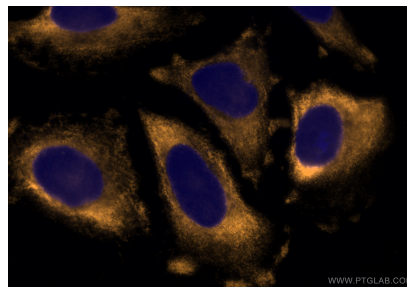
PBS with 50% glycerol, 0.05% Proclin300, 0.5% BSA, pH7.3

Aliquoting is unnecessary for -20°C storage

Selected Validation Data



1X10⁶ HeLa cells were intracellularly stained with 0.4 ug CoraLite®555 Anti-Human HSP70 (CL555-66183, 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 HeLa cells using CoraLite®555 HSP70 antibody (CL555-66183, Clone: 4E7E5) at dilution of 1:200.