For Research Use Only

CoraLite® Plus 488-conjugated HSP70 Monoclonal antibody

www.ptglab.com

Purification Method:

Protein G purification

Recommended Dilutions:

Excitation/Emission maxima

IF/ICC 1:50-1:500

wavelengths: 493 nm / 522 nm

CloneNo.:

4E7E5

IF/ICC: HEK-293 cells,

Catalog Number: CL488-66183

Basic Information

Catalog Number: GenBank Accession Number:

CL488-66183 BC009322 GeneID (NCBI):

100ul, Concentration: 1000 ug/ml by 3303 Nanodrop: **UNIPROT ID:** PoDMV8 Mouse Full Name:

Isotype: heat shock 70kDa protein 1A

lgG1 Calculated MW:

Immunogen Catalog Number: 70 kDa AG19111

Observed MW: 65-70 kDa

Positive Controls: **Tested Applications:**

Species Specificity: human, mouse, rat, yeast

IF/ICC, FC (Intra)

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

Applications

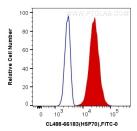
Storage:

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

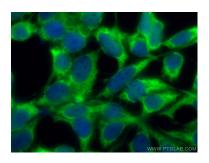
PBS with 50% Glycerol, 0.05% Proclin300, 0.5% BSA, pH 7.3.

Aliquoting is unnecessary for -20°C storage

Selected Validation Data



1X10^6 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.