Datasheet for ABIN2486622

anti-Hsc70 antibody (AA 550-646) (Biotin)

Go to Product page

4 Images

Overview

Quantity:	100 µL
Target:	Hsc70 (HSPA8)
Binding Specificity:	AA 550-646
Reactivity:	Human
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This Hsc70 antibody is conjugated to Biotin
Application:	Western Blotting (WB), Immunohistochemistry (IHC), Immunoprecipitation (IP), Immunofluorescence (IF), Immunocytochemistry (ICC), BioImaging (BI)

Product Details

Immunogen:	Synthetic peptide corresponding to the C-terminal end of human HSP73 (550-646 aa)
Specificity:	Detects 73 kDa. Does not cross-react with HSP70.
Cross-Reactivity:	Hamster, Human, Mouse, Rat
Purification:	Rabbit Antiserum

Target Details

Target:	Hsc70 (HSPA8)
Alternative Name:	HSC70 (HSPA8 Products)
Background:	HSP70 genes encode abundant heat-inducible 70- kDa HSPs (HSP70s). In most eukaryotes

Copyright antibodies-online. All rights reserved.

Target Details

	HSP70 genes exist as part of a multigene family. They are found in most cellular compartments of eukaryotes including nuclei, mitochondria, chloroplasts, the endoplasmic reticulum and the cytosol, as well as in bacteria. The genes show a high degree of conservation, having at least 50 % identity (2). The N-terminal two thirds of HSP70s are more conserved than the C-terminal third. HSP70 binds ATP with high affinity and possesses a weak ATPase activity which can be stimulated by binding to unfolded proteins and synthetic peptides (3). When HSC70 (constitutively expressed) present in mammalian cells was truncated, ATP binding activity was found to reside in an N-terminal fragment of 44 kDa which lacked peptide binding capacity. Polypeptide binding ability therefore resided within the C-terminal half (4). The structure of this ATP binding domain displays multiple features of nucleotide binding proteins (5). When cells are subjected to metabolic stress (e.g. heat shock) a member of the HSP 70 family, HSP 70 (HSP72), is expressed, HSP 70 is highly related to HSC70 (>90 % sequence identity). Constitutively expressed HSC70 rapidly forms a stable complex with the highly inducible HSP70 in cells following heat shock. The interaction of HSC70 with HSP 70 is regulated by ATP. These two heat shock proteins move together in the cell experiencing stress. Furthermore, research on HSC70 has implicates it with a role in facilitating the recovery of centrosomal structure and function after heat shock (6).
Gene ID:	3312
NCBI Accession:	NP_006588
UniProt:	P11142

Application Details

Application Notes:	• WB (1:2000) • IHC (1:100) • ICC/IF (1:250) • optimal dilutions for assays should be determined by the user.
Comment:	0.5 µg/ml of ABIN2486622 was sufficient for detection of HSC70 20 µg of heat shocked HeLa cell lysate by colorimetric immunoblot analysis using Goat anti-rabbit IgG:HRP as the secondary antibody.
Restrictions:	For Research Use only

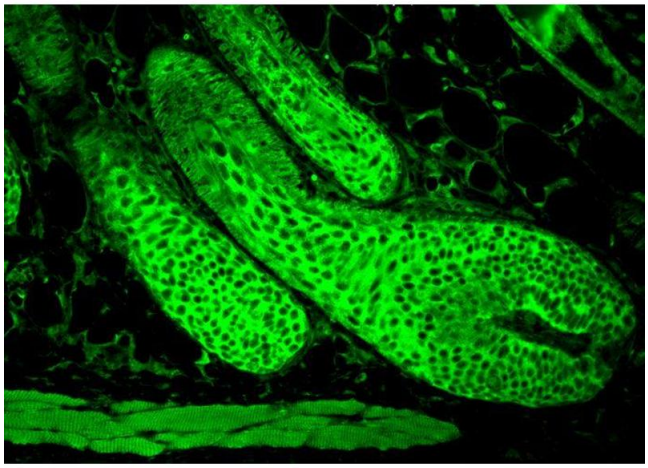
Handling

Format:	Liquid

Handling

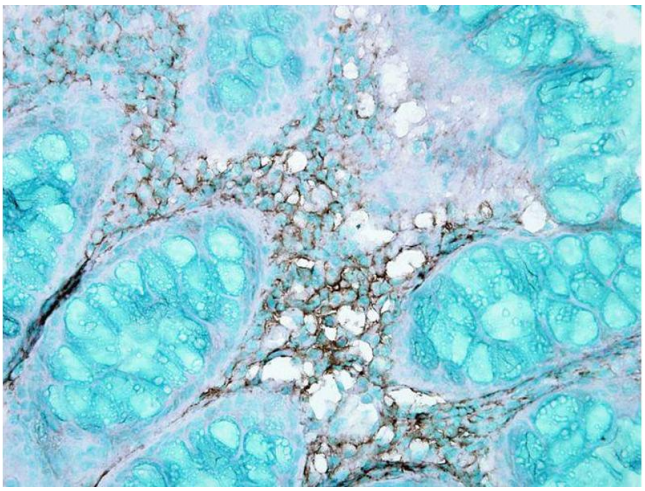
Buffer:	Rabbit Antiserum, Storage buffer may change when conjugated
Storage:	4 °C
Storage Comment:	Conjugated antibodies should be stored at 4°C

Images



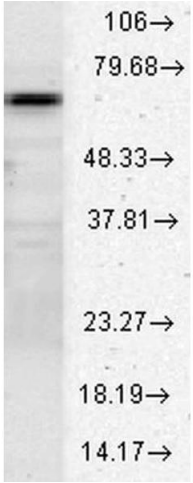
Immunohistochemistry

Image 1. Immunohistochemistry analysis using Rabbit Anti-HSC70 Polyclonal Antibody . Tissue: backskin. Species: Mouse. Fixation: Bouin's Fixative Solution. Primary Antibody: Rabbit Anti-HSC70 Polyclonal Antibody at 1:100 for 1 hour at RT. Secondary Antibody: FITC Goat Anti-Rabbit (green) at 1:50 for 1 hour at RT. Localization: Cytoplasm.



Immunohistochemistry

Image 2. Immunohistochemistry analysis using Rabbit Anti-HSC70 Polyclonal Antibody . Tissue: colon carcinoma. Species: Human. Fixation: Formalin. Primary Antibody: Rabbit Anti-HSC70 Polyclonal Antibody at 1:10000 for 12 hours at 4°C. Secondary Antibody: Biotin Goat Anti-Rabbit at 1:2000 for 1 hour at RT. Counterstain: Methyl Green at 200uL for 2 min at RT.



Western Blotting

Image 3. Western blot analysis of Human Cell line lysates showing detection of HSC70 protein using Rabbit Anti-HSC70 Polyclonal Antibody . Load: 15 µg protein. Block: 1.5% BSA for 30 minutes at RT. Primary Antibody: Rabbit Anti-HSC70 Polyclonal Antibody at 1:1000 for 2 hours at RT. Secondary Antibody: Donkey Anti-Rabbit IgG: HRP for 1 hour at RT.

Copyright antibodies-online. All rights reserved.

Images

Please check the product details page for more images. Overall 4 images are available for ABIN2486622.

 Copyright antibodies-online. All rights reserved.