

Hsp70 (Ser153) Antibody Rabbit Polyclonal Antibody

Catalog # AN1276

### Specification

# Hsp70 (Ser153) Antibody - Product Information

Application	WB
Primary Accession	P0DMV8
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Calculated MW	70052

#### Hsp70 (Ser153) Antibody - Additional Information

Gene ID3303Gene NameHSPA1ATarget/SpecificitySynthetic phospho-peptide corresponding to amino acid residues surrounding Thr153 conjugatedto KLH

Dilution WB~~ 1:1000

Format Antigen Affinity Purified from Pooled Serum

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions** Hsp70 (Ser153) Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Shipping Blue Ice

## Hsp70 (Ser153) Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

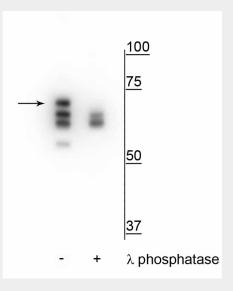
- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation



Flow Cytomety

<u>Cell Culture</u>

Hsp70 (Ser153) Antibody - Images



Western blot of T47D cell lysate treated with EGF (1 nM) for 60 minutes showing specific labeling of the ~70 kDa Hsp70 in the first lane (-). Phosphospecificity is shown in the second lane (+) where immunolabeling is eliminated or significantly decreased with lambda phosphatase ( $\lambda$ -Ptase, 1200 units for 30 minutes).

#### Hsp70 (Ser153) Antibody - Background

The Hsp70 family of heat shock proteins are considered stress-induced survival proteins as they are expressed when exposed to factors such as heat, hypoxia, oxidative stress, altered pH or by underlying factors like cancer (Daugaard et al. 2007). Hsp70 proteins are able to bind hydrophobic residues on misfolded proteins, thereby preventing their aggregation and thus serving important roles in protein homeostasis. To date, there have been 8 members of the family identified; the majority of which are found in the cytosol though some have specific function in tissue or an organelle (Murphy, 2013). Hsp70 has also been shown to play a major role in cancer; from tumor grade to prognosis, as well as chemotherapeutic drug resistance (Ciocca et al, 2005). There have been several phospho-serine and threonine sites identified within Hsp70, the role of each one has yet to be determined.