



RayBiotech, Inc.

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Certificate of Analysis and Data Sheet Rabbit anti- HSP70 antibody

Catalog No. 130-10052	Isotype: Rabbit Ig G	Species: Human	Accession No: P08107
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Description

In cooperation with other chaperones, Hsp70s stabilize preexistent proteins against aggregation and mediate the folding of newly translated polypeptides in the cytosol as well as within organelles. These chaperones participate in all these processes through their ability to recognize nonnative conformations of other proteins. They bind extended peptide segments with a net hydrophobic character exposed by polypeptides during translation and membrane translocation, or following stress-induced damage. In case of rotavirus A infection, serves as a post-attachment receptor for the virus to facilitate entry into the cell.

Applications

Table Summary of antibody applications and working conditions

Options / Functions	YES	NO	Not determined	Recommended Work dilution or concentration
ELISA	*			1:20000 (at least detecting 50 ng/ml)
Western Blotting			*	
Enzyme Immunoassay(EIA)			*	
Immunohistology - paraffin			*	
Immunohistology - resin			*	
Immunoprecipitation			*	
Flow Cytometry			*	
Neutralization			*	

Note: Other applications are not tested yet. Optimal dilutions should be determined by each laboratory for each application.

**The products are furnished for LABORATORY RESEARCH USE ONLY.
Not for diagnostic or therapeutic use.**



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Preparation

Immunogen was synthetic peptide derived from human HSP70. This antibody was produced from a rabbit immunized with the immunogen. The IgG fraction was purified from rabbit serum by ammonium sulphate precipitation, and followed by Protein A/G affinity chromatography.

Binding Activity

The antibody can specifically bind to its immunogen, and did not show any cross reactivity with unrelated antigens in ELISA. The specificity for binding to recombinant protein, cellular protein and native antigen is not defined. Cross reactivity with mouse and rat HSP70 was not tested yet.

Reconstitution

Supplied as lyophilized and purified antibody originally containing PBS, without **Preservative Stabilizers**, liking Sodium Azide. *It final concentration is indicated in shipping vial.*

The antibody is stable for at least years from the data of receipt when stored at -20°C to -70°C . Reconstituted antibody (suggesting with sterile PBS) can also be aliquotted and stored frozen at -20°C to -70°C in a manual defrost freezer for months without detectable loss activity. Upon reconstitution, the antibody can also be stored over months at 4°C . **Please avoid freeze-thaw cycles.**

Storage

Keep it at 4°C if intended for use within a month. Store at -20°C if over months. **Minimize freezing and thawing when use.**

Related products

1. Mouse Anti-Mycobacterium tuberculosis Heat Shock Protein-70 (HSP70) (cat# MD-02-0038)
2. Mouse Anti-Human Heat Shock Protein-70 (HSP70) (cat# MD-02-0037)

Reference

Mayer MP, et al. (2005) Hsp70 chaperones: cellular functions and molecular mechanism. Cell Mol Life Sci. 62(6):670-84.

Petrof EO, Ciancio MJ, Chang EB. Role and regulation of intestinal epithelial heat shock proteins in health and disease. Chin J Dig Dis. 2004;5(2):45-50.

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