

## Product datasheet for **AM02038PU-N**

### Sponge Hsp70 Mouse Monoclonal Antibody [Clone ID: IVF5]

#### Product data:

|                        |  |
|------------------------|--|
| Product Type:          | Primary Antibodies   |
| Clone Name:            | IVF5   |
| Applications:          | ELISA, IHC, IP, WB   |
| Recommended Dilution:  | <b>ELISA:</b> 1/5,000.<br><b>Western blot:</b> 1/500.<br><b>Immunoprecipitation:</b> 1/50.<br><b>Immunohistochemistry:</b> 1/50. |
| Reactivity:            | Geodia cydonium  |
| Host:                  | Mouse  |
| Isotype:               | IgG1   |
| Clonality:             | Monoclonal   |
| Immunogen:             | HSP70 from <i>Geodia cydonium</i> .  |
| Specificity:           | This antibody detects HSP70.   |
| Formulation:           | 50mM TRIS pH 7.4<br>State: Purified<br>State: Lyophilized IgG fraction   |
| Reconstitution Method: | Restore in aqua bidest to 1 mg/ml.   |
| Purification:          | Protein G chromatography   |
| Conjugation:           | Unconjugated   |
| Storage:               | Store lyophilized at 2-8°C and reconstituted at -20°C.<br>Avoid repeated freezing and thawing.                                   |
| Stability:             | Shelf life: One year from despatch.  |
| Database Link:         | <u><a href="#">Q24952</a></u>  |



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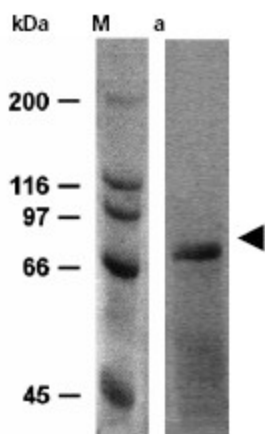
**Background:**

Heat shock proteins (HSPs) or stress response proteins (SRPs) are synthesized in variety of environmental and pathophysiological stressful conditions. Many HSPs are involved in processes such as protein denaturation-renaturation, folding-unfolding, transport-translocation, activation-inactivation, and secretion. HSP70 is found to be associated with steroid receptors, actin, p53, polyoma T antigen, nucleotides, and other unknown proteins. Also, HSP70 has been shown to be involved in protective roles against thermal stress, cytotoxic drugs, and other damaging conditions.

Heat shock proteins are produced by prokaryotic and eukaryotic cells, and are among the most conserved molecules in phylogeny. Eukaryotic cells contain an HSP70 multigene that differ in their intracellular location and regulation. Members of the HSP70 family play a major role in the folding, unfolding and translocation of polypeptides as well as in the assembly and disassembly of oligomeric protein complexes, as well as in the immune response. HSP72 was found to increase dramatically in the brains of Alzheimer's disease patients, and was localized exclusively in neuritic plaques and neurofibrillary tangles. HSP70 concentrates in nuclei during heat shock and returns to the cytoplasm when the shock is removed.

**Synonyms:**

Heat Shock Protein 70

**Product images:**


a: Extracts from cadmium chloride-exposed *Suberites domuncula* were separated by size and transferred to membranes. The blots were incubated with antibody IVF5. The arrow head points to the band, representing hsp70. M: Molecular mass marker proteins