

## DESCRIPTION

|                                                                                                                                                                                                         |                                                                                       |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| <b>Species Reactivity</b>                                                                                                                                                                               | Human                                                                                 |
| <b>Specificity</b>                                                                                                                                                                                      | Detects human HSP90 (α and β) in Western blots.                                       |
| <b>Source</b>                                                                                                                                                                                           | Polyclonal Goat IgG                                                                   |
| <b>Purification</b>                                                                                                                                                                                     | Antigen Affinity-purified                                                             |
| <b>Immunogen</b>                                                                                                                                                                                        | <i>E. coli</i> -derived recombinant human HSP90β<br>Met1-Asp724<br>Accession # P08238 |
| <b>Conjugate</b>                                                                                                                                                                                        | Alexa Fluor 750<br>Excitation Wavelength: 749 nm<br>Emission Wavelength: 775 nm       |
| <b>Formulation</b>                                                                                                                                                                                      | Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide                          |
| *Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions. |                                                                                       |

## APPLICATIONS

**Please Note:** Optimal dilutions should be determined by each laboratory for each application. General Protocols are available in the Technical Information section on our website.

**Western Blot** Optimal dilution of this antibody should be experimentally determined.

## PREPARATION AND STORAGE

|                                |                                                                                                                   |
|--------------------------------|-------------------------------------------------------------------------------------------------------------------|
| <b>Shipping</b>                | The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below. |
| <b>Stability &amp; Storage</b> | Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied                          |

## BACKGROUND

The heat shock protein-90 kDa (HSP90) is a composite name for a large group of genes whose molecular weights average 90 kDa. HSP90 functions primarily as a molecular chaperone, facilitating the folding of other cellular proteins, preventing protein aggregation, or targeting improperly folded proteins to specific degradative pathways. HSP90 is ubiquitously expressed, highly conserved and accounts for 1-2% of the total cellular protein. Recently introduced, standardized nomenclature has divided the 17 identified HSP90 genes into three related and one unrelated classes, HSP90aa, HSP90AB, HSP90BB, and TRAP, respectively. Six of these genes were functional while the remaining 11 are considered putative pseudogenes. Eukaryotic cells have two principal isoforms of HSP90. The antibody described here is to HSP90AB1-isoform 1, a 724 amino acid protein that is constitutively expressed. HSP90AB1-1 is also known as HSP90β, HSP90B, HSPCB, HSPC2, and HSP89β. The inducible form, HSP90AA1, is a 737 amino acid protein also known as HSP90α, HSP90A, HSPC1, HSPCA, HSP89α and LAP2. HSP90AB1-1 and HSP90AA are share 90% identity. In addition to its role as a molecular chaperone and stress response protein, HSP90 is a central component in a number of basic cellular processes including hormone signaling and cell cycle control.

## PRODUCT SPECIFIC NOTICES

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