

## DESCRIPTION

|                           |   |
|---------------------------|---|
| <b>Species Reactivity</b> | Human   |
| <b>Specificity</b>        | Detects human HSP10/EPF in Western blots.   |
| <b>Source</b>             | Monoclonal Mouse IgG <sub>2B</sub> Clone # 330629   |
| <b>Purification</b>       | Protein A or G purified from hybridoma culture supernatant  |
| <b>Immunogen</b>          | <i>E. coli</i> -derived recombinant human HSP10/EPF<br>Ala2-Asp102<br>Accession # P61604  |
| <b>Formulation</b>        | Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details.<br>*Small pack size (-SP) is supplied either lyophilized or as a 0.2 µm filtered solution in PBS. |

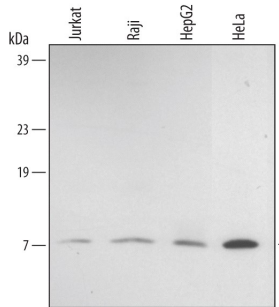
## APPLICATIONS

**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.

|                            | <b>Recommended Concentration</b> | <b>Sample</b> |
|----------------------------|----------------------------------|---------------|
| <b>Western Blot</b>        | 1 µg/mL                          | See Below     |
| <b>Immunocytochemistry</b> | 8-25 µg/mL                       | See Below     |

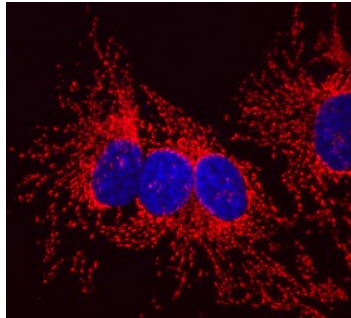
## DATA

**Western Blot**



**Detection of Human HSP10/EPF by Western Blot.** Western blot shows lysates of Jurkat human acute T cell leukemia cell line, Raji human Burkitt's lymphoma cell line, HepG2 human hepatocellular carcinoma cell line, and HeLa human cervical epithelial carcinoma cell line. PVDF membrane was probed with 1 µg/mL of Mouse Anti-Human HSP10/EPF Monoclonal Antibody (Catalog # MAB3298) followed by HRP-conjugated Anti-Mouse IgG Secondary Antibody (Catalog # HAF007). A specific band was detected for HSP10/EPF at approximately 8-9 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 2.

**Immunocytochemistry**



**HSP10/EPF in HeLa Human Cell Line.** HSP10/EPF was detected in immersion fixed HeLa human cervical epithelial carcinoma cell line using Mouse Anti-Human HSP10/EPF Monoclonal Antibody (Catalog # MAB3298) at 10 µg/mL for 3 hours at room temperature. Cells were stained using the NorthernLights™ 557-conjugated Anti-Mouse IgG Secondary Antibody (red; Catalog # NL007) and counterstained with DAPI (blue). Specific staining was localized to mitochondria. View our protocol for [Fluorescent ICC Staining of Cells on Coverslips](#).

## PREPARATION AND STORAGE

|                                |  |
|--------------------------------|--|
| <b>Reconstitution</b>          | Reconstitute at 0.5 mg/mL in sterile PBS.  |
| <b>Shipping</b>                | The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.<br>*Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C   |
| <b>Stability &amp; Storage</b> | <b>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</b> <ul style="list-style-type: none"> <li>12 months from date of receipt, -20 to -70 °C as supplied.</li> <li>1 month, 2 to 8 °C under sterile conditions after reconstitution.</li> <li>6 months, -20 to -70 °C under sterile conditions after reconstitution.</li> </ul> |

## BACKGROUND

The heat shock proteins (HSPs) are a highly conserved family of stress response proteins. HSPs function primarily as molecular chaperones, facilitating the folding of other cellular proteins, preventing protein aggregation, or targeting improperly folded proteins to specific degradative pathways. HSP10, also known as HSPe1, chaperonin 10 and Early Pregnancy Factor (EPF), is a 10.8 kDa protein with an apparent molecular weight of 8-9 kDa that exists intracellularly as a 7 subunit multimer and assists HSP60 in folding non-native proteins.