

Datasheet



Mouse mAb to **HSP27**
Clone **EBS-O-060**
Isotype **IgG1-κ**

Source

A BALB/c mouse was immunized with HSP27 derived from MCF-7.
Fusion partner: NS-1.

Specifications

EBS-O-060 reacts with heat shock protein 27 (HSP27) in human and monkey tissues and cell lines such as MCF-7. HSP27, also referred to as the Estrogen-Regulated 24K protein and HSP28, is one of several small heat shock proteins produced by all organisms studied. HSP27 synthesis is induced by elevated temperature, as well as by estrogen in hormone responsive cells. Interestingly, human HSP27 also shares greater than 50% homology with low molecular weight Drosophila HSPs and mammalian alpha-crystalline lens protein. Because of the estrogen responsive nature of HSP27, this protein has been studied extensively in human estrogen responsive tissues such as cervix, endometrium and breast tissue. Therefore HSP27 may be useful in classifying various hormone sensitive tumors.

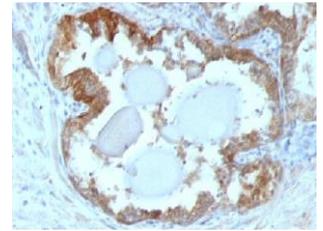


Figure 1: Human prostate cancer stained with EBS-O-060 (paraffin)

Species reactivity

Positive: chicken, chimpanzee, human, monkey, mouse, sheep, rat.

Applications

Demonstrate HSP27 in IHC, FC, IF, ELISA or Immunoblot.

ELISA	Flow cytometry	Frozen sections	Immunofluorescence	Paraffin sections	Western blot
+	+	+	+	Citrate	+

Format

Produced in tissue culture, contains no host Ig. Antibodies are affinity purified and presented in PBS with 0,02 % sodium azide.

Stored at 4°C- 8°C, shelf life is at least 24 months after purchase.

Dilution advice

- ELISA (solid phase: 0,1-100 µg/ml; tracer: 0,001-100 µg/ml for 30 min at RT).
- Flow cytometry (0.5-1.0 µg/million cells in 0.1 ml).
- Immunoblotting (1-2 µg/ml).
- Immunofluorescence (0.5-1 µg/ml).
- Immunohistology (1-2 µg/ml for 30 min at RT; staining of formalin-fixed tissues is enhanced by boiling tissue sections in 10mM citrate buffer, pH 6.0, for 10-20 min followed by cooling at RT for 20 minutes).

Positive control

~50% Of breast cancers are positive for hsp27 especially those that are also positive for ER and/or PgR.

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References

- Adams, D.J. et al. *Cancer Res.* **43**: 4297-4301 (1983).
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- Moretti-Rojas, I, et al. *Breast Cancer Res. And Treat.* **11**: 155-163 (1988).
- McGuire, S.E. et al. *Somatic Cell and Molecular Genetics* **15**: 167-163 (1988).
- Edwards, D.P et al. *Breast Cancer Res.and Treat.* **1**: 209-223 (1981).