

Product Specification Sheet

Cat. #MA-30028

Mouse Monoclonal Anti Human HSPA25; Ascites

SIZE : 100 ul

When Chinese hamster K12 cells are starved of glucose, the synthesis of several proteins, called glucose-regulated proteins (GRPs), is markedly increased. Hendershot et al. (1994) (PubMed 8020977) pointed out that one of these, GRP78 (HSPA5), also referred to as 'immunoglobulin heavy chain-binding protein' (BiP), is a member of the heat-shock protein-70 (HSP70) family and is involved in the folding and assembly of proteins in the endoplasmic reticulum (ER). Because so many ER proteins interact transiently with GRP78, it may play a key role in monitoring protein transport through the cell. Probably plays a role in facilitating the assembly of multimeric protein complexes inside the ER. The HSP70 proteins are ubiquitous molecular chaperones that are found in all organisms and tissue types. Like other members of the HSP70 family, BiP is a peptide-binding ATPase that is able to differentiate native proteins from unfolded polypeptides. BiP does not bind to fully folded and assembled proteins, except in the presence of other co-chaperones. BiP is involved in a number of key mechanisms and pathways including polypeptide translocation across the endoplasmic reticulum, folding, assembly, transport of secreted or membrane proteins, and the regulation of calcium homeostasis. Although BiP is relatively abundant, marked increases in BiP occur where there is an accumulation of unfolded polypeptides. For this reason, BiP has been identified as a marker for various disease states that are associated with secretory and transmembrane protein misfolding.

**Source of Antigen and Antibodies**

<b>Antigen</b>	Purified recombinant fragment of human HSPA5 expressed in E. Coli.
<b>Ab Host/type</b>	Balb/c mouse. IgG1 Ascetic fluid containing 0.05% sodium azide.
<b>2-Ab</b>	Goat Anti-mouse IgG-HRP conjugate Cat # 40320 (AP, biotin, FITC conjugates also available)
<b>-ve control IgG</b>	Cat # 20008-1, Mouse (non-immune) Serum IgG, purified, suitable for ELISA, Western, IHC as -ve control

**Isotype controls:**

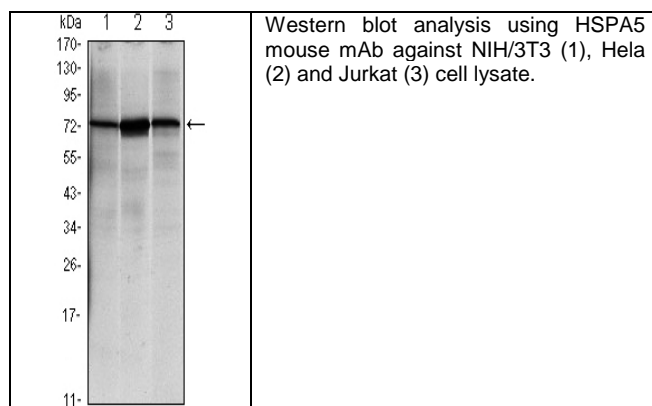
Catalog#	Product Description
20102-101	Mouse IgG1 isotype control, purified
20102-101-APC	Mouse IgG1-APC conjugate (isotype control)
20102-101-B	Mouse IgG1-Biotin conjugate (isotype control)
20102-101-F	Mouse IgG1-FITC conjugate (isotype control)
20102-101-FP	Mouse IgG1-FITC-PE conjugate (isotype control)
20102-101-HP	Mouse IgG1-HRP conjugate (isotype control)
20102-101-PC5	Mouse IgG1-PE-Cy5 conjugate (isotype control)
20102-101-PE	Mouse IgG1-PE conjugate (isotype control)

**Suggested Dilutions:**

Western blot	1:500 – 1:2000
Immunohistochemistry (IHC):	1:200 – 1:1000
Immunocytochemistry (ICC):	N/A
Flow cytometry (FCM):	N/A
ELISA	1:5000 – 1:100000

**Form:** Antibodies are supplied in PBS, pH 7.5, 0.05% azide and 0.1% BSA in liquid (0.5-1 mg/ml) or lyophilized in the same buffer. Reconstitute powder in 100 ul water or PBS. Store at -20°C or below in suitable size Aliquotes.

**Shipping:** 4°C for solutions and room temp for powder.



**References:**

Int J Cancer. 2010 Apr 1;126(7):1562-9. J Virol. 2009 Dec;83(23):12622-5. Mod Pathol. 2010 Jan;23(1):45-53.  
\*All products are for In vitro research use only.

**Related material available from ADI**

MA-30028

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