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B2M Antibody

Mouse Monoclonal Antibody (Mab)
Catalog # AW5057

Product Information

Application	WB
Primary Accession	P61769
Other Accession	NP_004039.1
Reactivity	Mouse, Rat, Human
Host	Mouse
Clonality	Monoclonal
Calculated MW	13715
Isotype	IgG1
Antigen Source	HUMAN

Additional Information

Gene ID	567
Antigen Region	10-39
Other Names	B2M; Beta-2-microglobulin; Beta-2-microglobulin form pI 5.3
Dilution	WB~~1:1000
Target/Specificity	This B2M antibody is generated from mice immunized with a KLH conjugated synthetic peptide between 10-39 amino acids from human B2M.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	B2M Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	B2M (HGNC:914)
Function	Component of the class I major histocompatibility complex (MHC). Involved in the presentation of peptide antigens to the immune system. Exogenously applied M.tuberculosis EsxA or EsxA-EsxB (or EsxA expressed in host) binds B2M and decreases its export to the cell surface (total protein levels do not

	change), probably leading to defects in class I antigen presentation (PubMed:25356553).
Cellular Location	Secreted. Cell surface. Note=Detected in serum and urine (PubMed:1336137, PubMed:7554280). {ECO:0000269|PubMed:7554280, ECO:0000269|Ref.6}

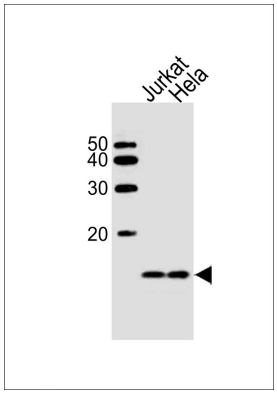
Background

This gene encodes a serum protein found in association with the major histocompatibility complex (MHC) class I heavy chain on the surface of nearly all nucleated cells. The protein has a predominantly beta-pleated sheet structure that can form amyloid fibrils in some pathological conditions. A mutation in this gene has been shown to result in hypercatabolic hypoproteinemia.

References

Bailey, S.D., et al. Diabetes Care 33(10):2250-2253(2010)
Rennella, E., et al. J. Mol. Biol. 401(2):286-297(2010)
Debelouchina, G.T., et al. J. Am. Chem. Soc. 132(30):10414-10423(2010)
Mumtaz, A., et al. Saudi J Kidney Dis Transpl 21(4):701-706(2010)
Guo, H.C., et al. Nature 360(6402):364-366(1992)

Images



Western blot analysis of lysates from Jurkat,Hela cell line (from left to right), using B2M Antibody (N-term)(Cat. #AW5057). AW5057 was diluted at 1:1000 at each lane. A goat anti-mouse IgG H&L(HRP) at 1:10000 dilution was used as the secondary antibody.Lysates at 20ug per lane.