

For Research Use Only

HMGB1 Monoclonal antibody

Catalog Number: 66525-1-Ig **41 Publications**



Basic Information

Catalog Number: 66525-1-Ig	GenBank Accession Number: BC003378	Purification Method: Protein A purification
Size: 150ul , Concentration: 1900 ug/ml by Nanodrop and 1000 ug/ml by Bradford method using BSA as the standard;	GeneID (NCBI): 3146	CloneNo.: 1D12A6
Source: Mouse	UNIPROT ID: P09429	Recommended Dilutions: WB 1:1000-1:6000
Isotype: IgG1	Full Name: high-mobility group box 1	
Immunogen Catalog Number: AG1264	Calculated MW: 25 kDa	
	Observed MW: 30 kDa	

Applications

Tested Applications: WB, ELISA	Positive Controls: WB : HepG2 cells, HeLa cells, Jurkat cells, NIH/3T3 cells, L02 cells, K-562 cells
Cited Applications: WB, IHC, IP, CoIP	
Species Specificity: human, mouse	
Cited Species: human, mouse, rat	

Background Information

The HMG (high mobility group) proteins are nonhistone chromosomal proteins that is present in almost all eukaryotic cells, and it functions to stabilize NUCLEOSOME formation and acts as a transcription-factor-like protein that regulates the expression of several genes[PMID: 18160415]. Once injury, infection or other inflammatory stimuli, activated macrophages, mature dendritic cells and natural killer cells can secrete HMGB1, which act as a crucial cytokine[PMID: 20163887]. HMGB1 also involved in V(D)J recombination by acting as a cofactor of the RAG complex, stimulating cleavage and RAG protein binding at the 23 bp spacer of conserved recombination signal sequences (RSS)[PMID: 19360789]. Act as a Heparin-binding protein that has a role in the extension of neurite-type cytoplasmic processes in developing cells. HMGB1 (high mobility group box 1) modulates gene expression in the nucleus, but certain immune cells secrete HMGB1 as an extracellular Alarmin to signal tissue damage. The nuclear HMGB1 relocates to the extracellular milieu in senescent human and mouse cells in culture and in vivo, which stimulated cytokine secretion through TLR-4 signaling (23649808). This antibody is raised against full length HMGB1 of human origin. The monomeric HMGB1 is 29 kDa and dimer is 58 kDa.

Notable Publications

Author	Pubmed ID	Journal	Application
Xuan Wang	36167857	Nat Commun	WB
Yichao Du	34512864	Oxid Med Cell Longev	WB
Zhuan Feng	34626772	Biochim Biophys Acta Mol Basis Dis	WB

Storage

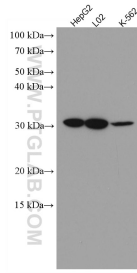
Storage:
Store at -20°C. Stable for one year after shipment.
Storage Buffer:
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.
Aliquoting is unnecessary for -20°C storage

*** 20ul sizes contain 0.1% BSA

For technical support and original validation data for this product please contact:
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)
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Selected Validation Data



Various lysates were subjected to SDS PAGE followed by western blot with 66525-1-Ig (HMGB1 antibody) at dilution of 1:3000 incubated at room temperature for 1.5 hours.