

HMGB1 Polyclonal antibody

Catalog Number: 10829-1-AP

Featured Product

219 Publications

Basic Information

Catalog Number: 10829-1-AP	GenBank Accession Number: BC003378	Purification Method: Antigen affinity purification
Size: 150ul , Concentration: 800 µg/ml by Nanodrop;	GeneID (NCBI): 3146	Recommended Dilutions: WB 1:1000-1:6000 IHC 1:50-1:500
Source: Rabbit	Full Name: high-mobility group box 1	
Isotype: IgG	Calculated MW: 25 kDa	
Immunogen Catalog Number: AG1264	Observed MW: 25-30 kDa	

Applications

Tested Applications: IHC, WB, ELISA	Positive Controls:
Cited Applications: ChIP, CoIP, FC, IF, IHC, IP, RIP, WB	WB : HepG2 cells, RAW 264.7 cells, Jurkat cells, mouse kidney tissue, K-562 cells, C6 cells
Species Specificity: human, mouse, rat	IHC : mouse brain tissue, human breast cancer tissue
Cited Species: human, rat, mouse, zebrafish	
Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0	

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 a rabbit polyclonal antibody 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
Lihua Luo	34593005	J Nanobiotechnology	WB
Xufeng Tao	25083618	Transplantation	WB
Yuanli Huang	34594133	Cancer Manag Res	IHC

Storage

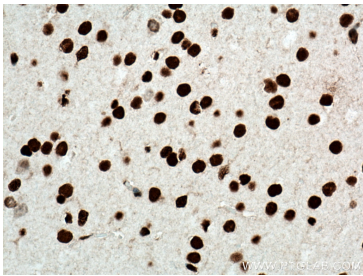
Storage:
Store at -20°C. Stable for one year after shipment.
Storage Buffer:
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.
Aliquoting is unnecessary for -20°C storage

*** 20ul sizes contain 0.1% BSA

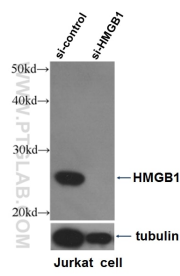
For technical support and original validation data for this product please contact:
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)
E: proteintech@ptglab.com
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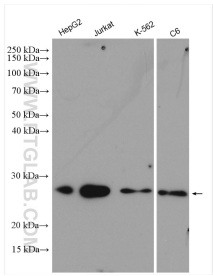
Selected Validation Data



Immunohistochemical analysis of paraffin-embedded mouse brain tissue slide using 10829-1-AP (HMGB1 antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



WB result of HMGB1 antibody (10829-1-AP, 1:1500) with si-control and si-HMGB1 transfected Jurkat cells.



Various lysates were subjected to SDS PAGE followed by western blot with 10829-1-AP (HMGB1 antibody) at dilution of 1:3000 incubated at room temperature for 1.5 hours.