

Hamster HIGH MOBILITY GROUP PROTEIN B1 Monoclonal Antibody | anti-HMGB1 antibody

HAMSTER ANTI HIGH MOBILITY GROUP PROTEIN B1

CATALOG # AAA50153	HOST Hamster	APPLICATIONS Western Blot, Immunofluorescence, Flow Cytometry, Functional Assay
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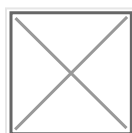
PRODUCT SYNONYMS

HIGH MOBILITY GROUP PROTEIN B1; Monoclonal Antibody; HAMSTER ANTI HIGH MOBILITY GROUP PROTEIN B1; anti-HMGB1 antibody

PRODUCT SPECIFICATIONS

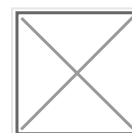
Host	Hamster
Clonality	Monoclonal
Isotype	IgG
Clone Number	HMG1-5H6
Form/Format	Purified Purified IgG - liquid
Concentration	IgG concentration 1.0mg/ml (varies by lot)
Sequence Length	215
Applicable Applications for anti-HMGB1 antibody	WB (Western Blot), IF (Immunofluorescence), FCM/FACS (Flow Cytometry)
Perservative Stabilisers	0.09% Sodium Azide (NaN ₃) Preparation
Immunogen	Recombinant mouse HMGB1 Buffer Solution
Target Species	Mouse
Preparation and Storage	Store at 4 degree C or at -20 degree C if preferred. Storage in frost-free freezers is not recommended. This product should be stored undiluted. Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use. Shelf Life: 18 months from date of despatch.

IMAGES



Application Data

Staining of permeabilized RAW264.7 cells with Hamster anti Mouse high mobility group protein B1 followed by Goat anti Hamster IgG:PE



Application Data

Immunofluorescence staining of PFA fixed permeabilized NIH-3T3 cells with Hamster anti Mouse high mobility group protein B1, signal was visualized using Goat anti Hamster IgG:biotin followed by streptavidin:AlexaFluor594



Application Data

Western Blotting analysis of proteins and cell line lysates probed with Hamster anti Mouse high mobility group protein B1

ADDITIONAL INFORMATION

Related Product Information for anti-HMGB1 antibody	Hamster anti High Mobility Group Protein B1 antibody, clone HMG1-5H6 specifically recognizes High mobility group protein B1 (HMGB1), a ubiquitously expressed nuclear DNA binding protein, and one of a newly emerging group of alarmins, which acts as a stabilizer of nucleosome formation, and facilitates transcription factor binding, by bending DNA. HMGB1 is one of the signature danger signals of endogenous cellular injury, and is released outside the cell by necrotic and inflammatory cells to act as a chemoattractant for immature dendritic cells (DCs), promoting their maturation. DCs can also secrete HMGB1, promoting proliferation and Th1 polarization of interacting T cells. Cellular injury resulting in necrosis, leads to passive HMGB1 release, and microbes or pro-inflammatory cytokines may later stimulate active release from APCs. HMGB1 is emerging as a prime specific marker and regulator of necrotic cell death, possibly through the PI3KC3-MEK-ERK pathway. It interacts directly with the autophagy protein Beclin-1, and binds to receptors, such as RAGE on endothelial cells, and Toll-like receptors on macrophages. Studies identifying microtubule-associated protein 1 light chain 3 (LC3) lipidation and redistribution, coupled with the accumulation of autophagosomes and autolysosomes, have shown an important role for HMGB1 release in sustaining autophagy. Studies have also shown that HMGB1 released after chemotherapy treatment is a critical regulator of autophagy, and a potential drug target for therapeutic interventions in leukemia. HMGB1 is increasingly recognized as an important protein in medical research. It is angiogenic and promotes cardiac stem cell growth and differentiation, it may act as an adjuvant or assist in tissue repair, and is also a prototypical damage-associated molecular pattern molecule (DAMP) which co-precipitates with CD24 and is associated with the hallmarks of cancer. Accelerated levels of HMGB1 are seen in
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NCBI AND UNIPROT INFORMATION

NCBI GI #	4504425
NCBI GeneID	3146
NCBI Accession #	NP_002119.1
NCBI GenBank Nucleotide #	NM_002128.4
Molecular Weight	24,894 Da
NCBI Official Full Name	high mobility group protein B1
NCBI Official Synonym Full Names	high mobility group box 1
NCBI Official Symbol	HMGB1
NCBI Official Synonym Symbols	HMG1; HMG3; SBP-1
NCBI Protein Information	high mobility group protein B1; Amphoterin; HMG-1; Sulfoglucuronyl carbohydrate binding protein; high mobility group protein 1; high-mobility group (nonhistone chromosomal) protein 1; high-mobility group box 1
UniProt Protein Name	High mobility group protein B1
UniProt Gene Name	HMGB1
UniProt Synonym Gene Names	HMG1; HMG-1
UniProt Entry Name	HMGB1_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.