

ARG65636 anti-HMGB1 antibody

Package: 100 µl, 50 µl
Store at: -20°C

Summary

Product Description	Rabbit Polyclonal antibody recognizes HMGB1
Tested Reactivity	Hu, Ms, Rat
Tested Application	IHC-P, WB
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Target Name	HMGB1
Species	Human
Immunogen	Synthetic peptide of human HMGB1
Conjugation	Un-conjugated
Alternate Names	HMG-1; High mobility group protein B1; High mobility group protein 1; HMG1; SBP-1; HMG3

Application Instructions

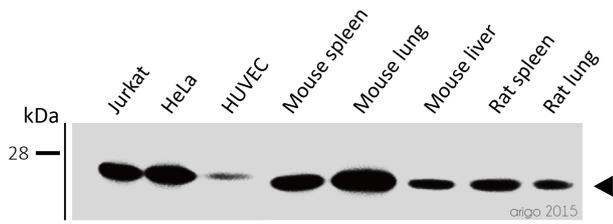
Application table	Application	Dilution
	IHC-P	50-200
	WB	500-2000

Application Note * The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.

Properties

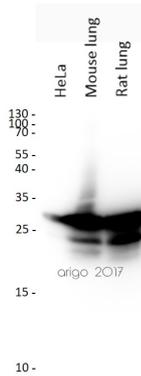
Form	Liquid
Purification	Affinity purification with immunogen.
Buffer	PBS (pH 7.4), 0.05% Sodium azide and 40% Glycerol
Preservative	0.05% Sodium azide
Stabilizer	40% Glycerol
Concentration	1.8 mg/ml
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.
Note	For laboratory research only, not for drug, diagnostic or other use.

Database links	GeneID: 15289 Mouse GeneID: 3146 Human Swiss-port # P09429 Human Swiss-port # P63158 Mouse
Gene Symbol	HMGB1
Gene Full Name	high mobility group box 1
Background	HMGB1 is a protein that belongs to the High Mobility Group-box superfamily. The encoded non-histone, nuclear DNA-binding protein regulates transcription, and is involved in organization of DNA. This protein plays a role in several cellular processes, including inflammation, cell differentiation and tumor cell migration. Multiple pseudogenes of this gene have been identified. Alternative splicing results in multiple transcript variants that encode the same protein. [provided by RefSeq, Sep 2015]
Function	HMGB1 is a DNA binding protein. It associates with chromatin and has the ability to bend DNA. Binds preferentially single-stranded DNA. Involved in V(D)J recombination by acting as a cofactor of the RAG complex. Acts by stimulating cleavage and RAG protein binding at the 23 bp spacer of conserved recombination signal sequences (RSS). [UniProt]
Highlight	Related products: HMGB1 antibodies ; HMGB1 ELISA Kits ; HMGB1 Duos / Panels ; HMGB1 recombinant proteins ; Anti-Rabbit IgG secondary antibodies ; Related news: HMGB1, a biomarker and therapeutic target in COVID-19 Total solution for HMGB1 research HMGB1 in inflammation Inflammatory Cytokines HMGB1 ELISA Kit for your research Detecting the DAMPs in cancer therapy by HMGB1 ELISA kit New HMGB1 neutralizing antibody is released Detecting exosomal HMGB1 for ICD research Related poster download: HMGB2 Pathway.pdf
Research Area	Gene Regulation antibody
Calculated Mw	25 kDa
PTM	Phosphorylated at serine residues. Phosphorylation in both NLS regions is required for cytoplasmic translocation followed by secretion (PubMed:17114460). Acetylated on multiple sites upon stimulation with LPS (PubMed:22801494). Acetylation on lysine residues in the nuclear localization signals (NLS 1 and NLS 2) leads to cytoplasmic localization and subsequent secretion (By similarity). Acetylation on Lys-3 results in preferential binding to DNA ends and impairs DNA bending activity (By similarity). Reduction/oxidation of cysteine residues Cys-23, Cys-45 and Cys-106 and a possible intramolecular disulfide bond involving Cys-23 and Cys-45 give rise to different redox forms with specific functional activities in various cellular compartments: 1- fully reduced HMGB1 (HMGB1C23hC45hC106h), 2- disulfide HMGB1 (HMGB1C23-C45C106h) and 3- sulfonyl HMGB1 (HMGB1C23soC45soC106so). Poly-ADP-ribosylated by PARP1 when secreted following stimulation with LPS (By similarity). In vitro cleavage by CASP1 is liberating a HMGB1-containing peptide which may mediate immunogenic activity; the peptide antagonizes apoptosis-induced immune tolerance (PubMed:24474694). Can be proteolytically cleaved by a thrombin:thrombomodulin complex; reduces binding to heparin and proinflammatory activities (By similarity).



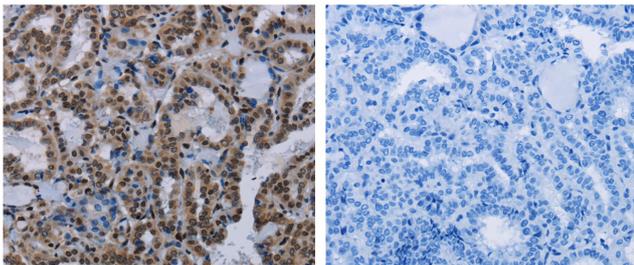
ARG65636 anti-HMGB1 antibody WB image

Western blot: 30 µg of Jurkat, HeLa, HUVEC, Mouse spleen, Mouse lung, Mouse liver, Rat spleen, and Rat lung lysates stained with ARG65636 anti-HMGB1 antibody at 1:200 dilution.



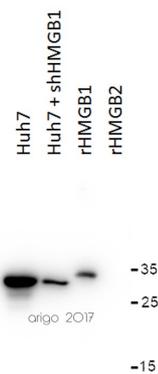
ARG65636 anti-HMGB1 antibody WB image

Western blot: 20 µg of HeLa, Mouse lung, and Rat lung lysates stained with ARG65636 anti-HMGB1 antibody at 1:500 dilution.



ARG65636 anti-HMGB1 antibody image

Immunohistochemistry: paraffin-embedded Human thyroid cancer stained with ARG65636 anti-HMGB1 antibody (left) at 1/30 dilution, or the same antibody preincubated with antigen (right). (Original magnification: X200)



ARG65636 anti-HMGB1 antibody WB image

Western blot: 20 µg of Huh7, Huh7 + shHMGB1 and 20 ng of rHMGB1, rHMGB2 stained with ARG65636 anti-HMGB1 antibody at 1:2000 dilution.