

Rabbit HMGB2 Polyclonal Antibody | anti-HMGB2 antibody

HMGB2 Antibody

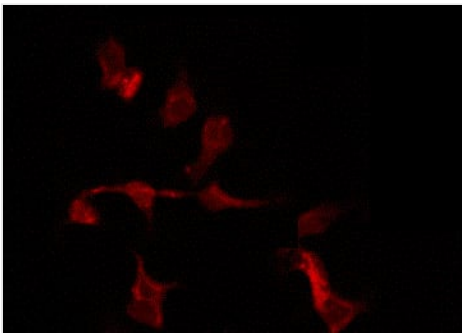
CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA323842	Rabbit	Human, Mouse, Rat	ELISA, Immunocytochemistry, Immunofluorescence, Western Blot

PRODUCT SYNONYMS

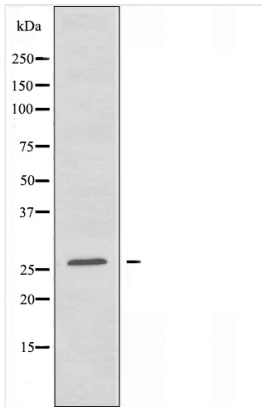
HMGB2; Polyclonal Antibody; HMGB2 Antibody; C80539; High mobility group (nonhistone chromosomal) protein 2; High mobility group box 2; High mobility group protein 2; High mobility group protein B2; HMG 2; HMG B2; HMG-2; HMG2; HMGB2_HUMAN; anti-HMGB2 antibody

PRODUCT SPECIFICATIONS

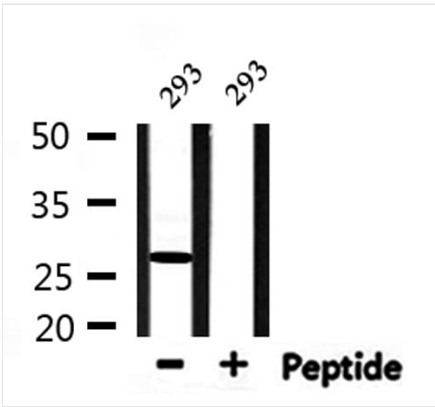
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Isotype	IgG
Specificity	HMGB2 antibody detects endogenous levels of total HMGB2
Purity/Purification	The antiserum was purified by peptide affinity chromatography using SulfoLink Coupling Resin.
Form/Format	Liquid Phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Concentration	1mg/ml (varies by lot)
Sequence Length	209
Applicable Applications for anti-HMGB2 antibody	ELISA, ICC (Immunocytochemistry), IF (Immunofluorescence), WB (Western Blot)
Immunogen	A synthesized peptide
Subcellular Location	Nucleus. Chromosome.
Tissue Specificity	Expressed in gastric and intestinal tissues (at protein level).
Predicted Cross Reactivity	Bovine, Horse, Sheep, Rabbit, Dog, Chicken
Similarity	Bovine (100%), Horse (100%), Sheep (100%), Rabbit (100%), Dog (100%), Chicken (82%)
Conjugation	Unconjugated
Preparation and Storage	Store at -20 degree C. Stable for 12 months from date of receipt.



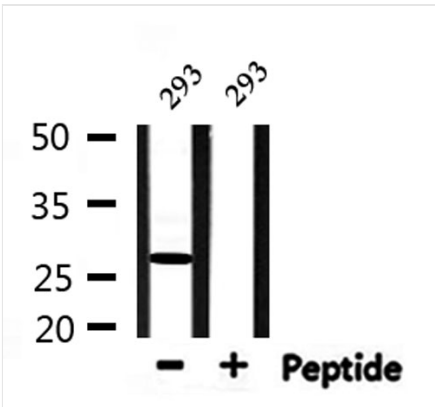
IF (Immunofluorescence)
AAA323842 staining COLO205 by IF/ICC. The sample were fixed with PFA and permeabilized in 0.1% Triton X-100, then blocked in 10% serum for 45 minutes at 25 degree C. The primary antibody was diluted at 1/200 and incubated with the sample for 1 hour at 37 degree C. An Alexa Fluor 594 conjugated goat anti-rabbit IgG (H+L) Ab, diluted at 1/600, was used as the secondary antibody.



WB (Western Blot)
Western blot analysis of extracts from COLO205 cells, using HMGB2 antibody.



WB (Western Blot)
Western blot analysis of extracts from mouse lung, using HMGB2 Antibody.



WB (Western Blot)
Western blot analysis of extracts from 293, using HMGB2 Antibody.

ADDITIONAL INFORMATION

Related Product Information for anti-HMGB2 antibody	Function: Multifunctional protein with various roles in different cellular compartments. May act in a redox sensitive manner. In the nucleus is an abundant chromatin-associated non-histone protein involved in transcription, chromatin remodeling and V(D)J recombination and probably other processes. Binds DNA with a preference to non-canonical DNA structures such as single-stranded DNA. Can bent DNA and enhance DNA flexibility by looping thus providing a mechanism to promote activities on various gene promoters by enhancing transcription factor binding and/or bringing distant regulatory sequences into close proximity (PubMed:7797075, PubMed:11909973, PubMed:19522541, PubMed:18413230, PubMed:19965638, PubMed:20123072). 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) (By similarity). Proposed to be involved in the innate immune response to nucleic acids by acting as a promiscuous immunogenic DNA/RNA sensor which cooperates with subsequent discriminative sensing by specific pattern recognition receptors (By similarity). In the extracellular compartment acts as a chemokine. Promotes proliferation and migration of endothelial cells implicating AGER/RAGE (PubMed:19811285). Has antimicrobial activity in gastrointestinal epithelial tissues (PubMed:23877675). Involved in inflammatory response to antigenic stimulus coupled with proinflammatory activity (By similarity). Involved in modulation of neurogenesis probably by regulation of neural stem proliferation (By similarity). Involved in articular cartilage surface maintenance implicating LEF1 and the Wnt/beta-catenin pathway (By similarity). Subunit Structure: Interacts with POU2F2, POU2F1 and POU3F1 (By similarity). Component of the RAG complex composed of core components RAG1 and RAG2, and associated component HMGB1 or HMGB2 (By similarity). Component of the SET complex, composed of at least ANP32A, APEX1, HMGB2, NME1, SET and TREX1. Directly interacts with SET (PubMed:11909973). Interacts with LEF1 (By similarity). Post-translational Modifications: 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 HMGB2 (HMGB2C23hC45hC106h), 2-disulfide HMGB2 (HMGB2C23-C45C106h) and 3-sulfonyl HMGB2 (HMGB2C23soC45soC106so). Acetylation enhances nucleosome binding and chromatin remodeling activity. Similarity: Both, HMG box 1 and HMG box 2, show antimicrobial activity. Belongs to the HMGB family.
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NCBI AND UNIPROT INFORMATION

NCBI GI #	194688133
NCBI GeneID	3148
NCBI Accession #	NP_001124160.1
NCBI GenBank Nucleotide #	NM_001130688.1
UniProt Accession #	P26583; Q5U072; B2R4K8; D3DP37
Molecular Weight	Observed: 27 kD Predicted: 25 kDa
NCBI Official Full Name	high mobility group protein B2
NCBI Official Synonym Full Names	high mobility group box 2
NCBI Official Symbol	HMGB2
NCBI Official Synonym Symbols	HMG2
NCBI Protein Information	high mobility group protein B2
UniProt Protein Name	High mobility group protein B2
UniProt Gene Name	HMGB2
UniProt Synonym Gene Names	HMG2; HMG-2

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.