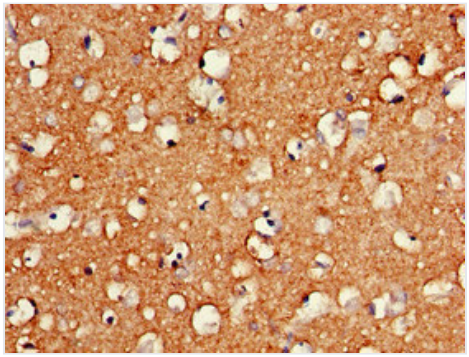
HMGB2 Antibody – Rabbit Polyclonal

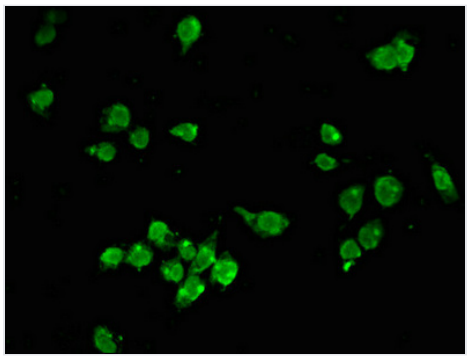
PRODUCT OVERVIEW

Product Name	HMGB2, Polyclonal Antibody
Full Product Name	HMGB2 Antibody
Product Gene Name	anti-HMGB2 antibody
Product Synonym Names	High mobility group protein B2; High mobility group protein 2; HMG-2; HMGB2; HMG2
Clonality	Polyclonal
Isotype	IgG
Host	Rabbit
Species Reactivity	Human
Form/Format	Liquid
Purity/Purification	>95%, Protein G purified
Preparation and Storage	Shipped at 4 degree C. Upon delivery aliquot and store at -20 degree C or -80 degree C. Avoid repeated freeze.
Matching Pairs	Unconjugated Antibody: HMGB2 (MBS7051120) HRP Conjugated Antibody: HMGB2 (MBS7051121)
Matching Pairs	Unconjugated Antibody: HMGB2 (MBS7051120) FITC Conjugated Antibody: HMGB2 (MBS7051122)
Matching Pairs	Unconjugated Antibody: HMGB2 (MBS7051120) Biotin Conjugated Antibody: HMGB2 (MBS7051123)
Molecular Weight	24,034 Da
OMIM	M83665 Genomic DNA
3D Structure	ModBase 3D Structure for P26583
Immunogen	Recombinant Human High mobility group protein B2 protein (43-185AA)
Preservative	0.03% Proclin 300
Constituents	50% Glycerol, 0.01M PBS, pH 7.4
Conjugation	Non-conjugated
Santa Cruz Alternative	Potential replacement for Santa Cruz Biotechnology antibody catalog# sc-26349 / sc-8758
ISO Certification	Manufactured in an ISO 9001:2015 Certified Laboratory.
Applications Tested/Suitable for anti-HMGB2 antibody	ELISA (EIA), Immunohistochemistry (IHC), Immunofluorescence (IF)
Application Notes for anti-HMGB2 antibody	IHC: 1: 20-1: 200 IF: 1: 50-1: 200

Related Product Information for anti-HMGB2 antibody	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).
Other Notes	Small volumes of anti-HMGB2 antibody vial(s) may occasionally become entrapped in the seal of the product vial during shipment and storage. If necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the container`s cap. Certain products may require to ship with dry ice and additional dry ice fee may apply.
Searchable Terms for HMGB2 purchase	MBS7051120 is an antibody targeting HMGB2. Also known as HMGB2 Antibody. Reactive in Human. Host: Rabbit.



Immunohistochemistry (IHC) of anti-HMGB2 antibody
Immunohistochemistry of paraffin-embedded human brain tissue using MBS7051120 at dilution of 1:100



Immunofluorescence (IF) of anti-HMGB2 antibody
Immunofluorescent analysis of SH-SY5Y cells using MBS7051120 at a dilution of 1:100 and Alexa Fluor 488-congugated AffiniPure Goat Anti-Rabbit IgG(H+L)

ADDITIONAL DETAILS

NCBI/Uniprot data below describe general gene information for HMGB2. It may not necessarily be applicable to this product.

NCBI GI #	194688133
NCBI GeneID	3148
NCBI Accession #	NP_001124160.1
UniProt Primary Accession #	P26583
UniProt Secondary Accession #	Q5U072; B2R4K8; D3DP37
UniProt Related Accession #	P26583
GenBank Nucleotide #	NM_001130688.1
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

UniProt Protein Name	High mobility group protein B2
UniProt Synonym Protein Names	High mobility group protein 2; HMG-2
Protein Family	High mobility group B protein
UniProt Gene Name	HMGB2
UniProt Synonym Gene Names	HMG2; HMG-2
UniProt Entry Name	HMGB2_HUMAN
NCBI Protein Information	high mobility group protein B2
NCBI Summary for HMGB2	This gene encodes a member of the non-histone chromosomal high mobility group protein family. The proteins of this family are chromatin-associated and ubiquitously distributed in the nucleus of higher eukaryotic cells. In vitro studies have demonstrated that this protein is able to efficiently bend DNA and form DNA circles. These studies suggest a role in facilitating cooperative interactions between cis-acting proteins by promoting DNA flexibility. This protein was also reported to be involved in the final ligation step in DNA end-joining processes of DNA double-strand breaks repair and V(D)J recombination. [provided by RefSeq, Jul 2008]
UniProt Comments for HMGB2	HMGB2: DNA binding proteins that 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). Belongs to the HMGB family. Protein type: DNA-binding; Nuclear receptor co-regulator Chromosomal Location of Human Ortholog: 4q31 Cellular Component: cell; condensed chromosome; cytoplasm; extracellular space; nuclear chromatin; nucleolus; nucleoplasm; nucleus; perinuclear region of cytoplasm; protein complex Molecular Function: chemoattractant activity; damaged DNA binding; DNA bending activity; DNA binding; double-stranded DNA binding; drug binding; four-way junction DNA binding; protein binding; RAGE receptor binding; single-stranded DNA binding; transcription factor activity; transcription factor binding Biological Process: defense response to Gram-negative bacterium; defense response to Gram-positive bacterium; DNA fragmentation during apoptosis; DNA geometric change; DNA ligation during DNA repair; DNA topological change; inflammatory response to antigenic stimulus; negative regulation of transcription, DNA-dependent; positive regulation of DNA binding; positive regulation of endothelial cell proliferation; positive regulation of erythrocyte differentiation; positive regulation of megakaryocyte differentiation; positive regulation of nuclease activity; positive regulation of transcription from RNA polymerase II promoter; positive regulation of transcription, DNA-dependent; regulation of neurogenesis; regulation of transcription from RNA polymerase II promoter; response to drug; response to lipopolysaccharide; V(D)J recombination
Research Articles on HMGB2	**1.** Lrp1-antisense directly binds to high-mobility group box 2 (Hmgb2) and inhibits the activity of Hmgb2 to enhance Srebp1a-dependent transcription of Lrp1.
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