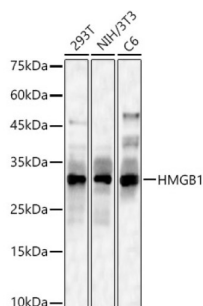
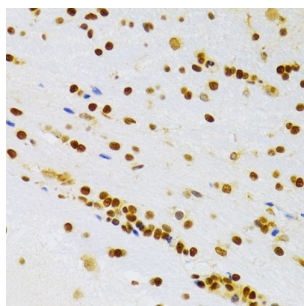


High Mobility Group Protein B1 (HMGB1) Antibody

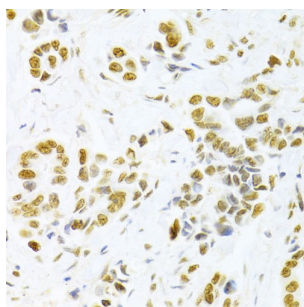
Catalogue No.: abx001990



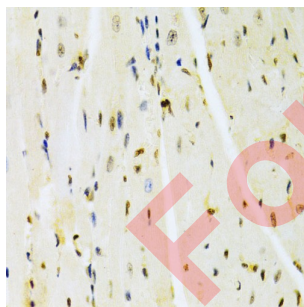
Western blot analysis of various lysates using HMGB1 Antibody (1/1000 dilution).



Immunohistochemistry of paraffin-embedded rat brain using HMGB1 Antibody (1/100 dilution, 40x lens). Microwave antigen retrieval was performed in 10 mM PBS buffer pH 7.2 before commencing with IHC staining protocol.



Immunohistochemistry of paraffin-embedded human breast cancer using HMGB1 antibody (1/100 dilution, 40x lens). Microwave antigen retrieval was performed in 10 mM PBS buffer pH 7.2 before commencing with IHC staining protocol.



Immunohistochemistry of paraffin-embedded mouse heart using HMGB1 antibody (1/100 dilution, 40x lens). Microwave antigen retrieval was performed in 10 mM PBS buffer pH 7.2 before commencing with IHC staining protocol.

HMGB1 Antibody is a Rabbit Polyclonal antibody against HMGB1. High mobility group protein B1 (HMGB1) belongs to a family of highly conserved proteins that contain HMG box domains (1,2). All three family members (HMGB1, HMGB2, and HMGB3) contain two HMG box domains and a C-terminal acidic domain. HMGB1 is a widely expressed and highly abundant protein (2). HMGB2 is widely expressed during embryonic development, but is restricted to lymphoid organs and testis in adult animals (3). HMGB3 is only expressed during embryogenesis (4). While expression varies, the biochemical properties of the different family members may be indistinguishable. The HMG box domains facilitate the binding of HMGB proteins to the minor groove of DNA, which results in local bending of the DNA double helix (1,2). HMGB proteins are recruited by and help facilitate the assembly of site-specific DNA binding proteins to their cognate binding sites in chromatin. For example, HMGB1 facilitates the binding of Hox proteins, Oct-1, p53, Rel proteins, and steroid hormone receptor proteins to their target gene promoters (1,2). In addition to their functions in the nucleus, HMGB proteins play a significant role in extracellular signaling associated with inflammation (5,6). HMGB1 is massively released into the extracellular environment during cell necrosis, but not apoptosis. Extracellular HMGB1

"alarms" the innate immune system by acting as a chemoattractant for inflammatory leukocytes, smooth muscle cells, and stem cells, functioning as an immune adjuvant for soluble and particulate antigens, and triggering activation of T cells and dendritic cells. In addition, activated monocytes, macrophages and, dendritic cells also secrete HMGB1, forming a positive feedback loop that results in the release of additional cytokines and neutrophils. Hypoxia has also been shown to cause the release of HMGB1 in the liver, and some studies suggest a role for extracellular HMGB1 in tumor homeostasis (5,6).

Target:	High Mobility Group Protein B1 (HMGB1)
Clonality:	Polyclonal
Reactivity:	Human, Mouse, Rat
Tested Applications:	WB, IHC
Host:	Rabbit
Recommended dilutions:	WB: 1/500 - 1/2000, IHC-P: 1/50 - 1/200. Not tested in IHC-F. Optimal dilutions/concentrations should be determined by the end user.
Conjugation:	Unconjugated
Immunogen:	A synthetic peptide corresponding to human HMGB1
Isotype:	IgG
Form:	Liquid
Purification:	Purified by affinity chromatography.
Storage:	Aliquot and store at -20°C. Avoid repeated freeze/thaw cycles.
UniProt Primary AC:	P09429 (UniProt , ExPASy)
Gene Symbol:	HMGB1
GeneID:	3146
NCBI Accession:	NP_002119.1
KEGG:	hsa:3146
String:	9606.ENSP00000345347
Molecular Weight:	Calculated MW: 24 kDa Observed MW: 29 kDa

Datasheet

Version: 5.0.0

Revision date: 11 Jun 2025



Buffer: PBS, pH 7.3, containing 0.01% thiomersal, 50% glycerol.

Concentration: 1 mg/ml

Note: THIS PRODUCT IS FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC, THERAPEUTIC OR COSMETIC PROCEDURES. NOT FOR HUMAN OR ANIMAL CONSUMPTION.

For Reference Only