

## HMGB1 Polyclonal Antibody

Catalog number: 10829-1-AP

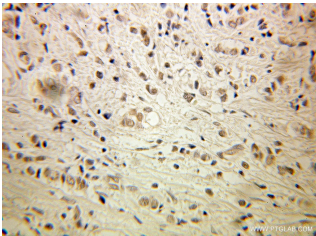
Size: 36 µg/150 µl

Source: Rabbit

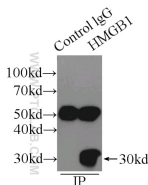
Isotype: IgG

Synonyms:

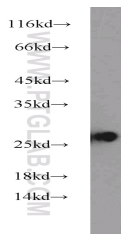
HMGB1; DKFZp686A04236,  
high mobility group box 1, High  
mobility group protein 1, High  
mobility group protein B1,  
HMG 1, HMG1, HMG3,  
HMGB1, SBP 1



Immunohistochemical of paraffin-embedded human breast cancer using 10829-1-AP (HMGB1 antibody) at dilution of 1:100 (under 10x lens)



IP Result of anti-HMGB1 (IP:10829-1-AP, 3µg; Detection:10829-1-AP 1:500) with HepG2 cells lysate 2900µg.



Jurkat cells were subjected to SDS PAGE followed by western blot with 10829-1-AP (HMGB1 antibody) at dilution of 1:1000

### Background

The HMG (high mobility group) proteins are nonhistone chromosomal proteins that is present in almost all eukaryotic cells, and it functions to stabilize NUCLEOSOME formation and acts as a transcription-factor-like protein that regulates the expression of several genes[PMID: 18160415]. Once injury, infection or other inflammatory stimuli, activated macrophages, mature dendritic cells and natural killer cells can secrete HMGB1, which act as a crucial cytokine[PMID: 20163887]. HMGB1 also involved in V(D)J recombination by acting as a cofactor of the RAG complex, stimulating cleavage and RAG protein binding at the 23 bp spacer of conserved recombination signal sequences (RSS)[PMID: 19360789]. Act as a Heparin-binding protein that has a role in the extension of neurite-type cytoplasmic processes in developing cells. HMGB1 (high mobility group box 1) modulates gene expression in the nucleus, but certain immune cells secrete HMGB1 as an extracellular Alarmin to signal tissue damage. The nuclear HMGB1 relocates to the extracellular milieu in senescent human and mouse cells in culture and in vivo, which stimulated cytokine secretion through TLR-4 signaling (23649808). This antibody is a rabbit polyclonal antibody raised against full length HMGB1 of human origin.

### Applications

Tested applications:

ELISA, WB, IHC, IP

Cited applications:

ChIP, FC, IF, IHC, WB

Species specificity:

Human, Mouse, Rat; other species not tested.

Cited species:

Human, mouse, rat

Calculated HMGB1 MW:

25 kDa

Observed HMGB1 MW:

30kd

Positive WB detected in

Jurkat cells, COLO 320 cells, HEK-293 cells, human brain tissue, human testis tissue, mouse brain tissue, mouse kidney tissue, rat brain tissue, rat stomach tissue

Positive IP detected in

HepG2 cells

Positive IHC detected in

Human breast cancer tissue

Recommended dilution:

WB: 1:500-1:5000

IP: 1:200-1:2000

IHC: 1:20-1:200

Application key: WB = Western blotting, IHC = Immunohistochemistry, IF = Immunofluorescence, IP = Immunoprecipitation

### Immunogen information

Immunogen:

Ag1264

GenBank accession number:

BC003378

Gene ID (NCBI):

3146

Full name:

High-mobility group box 1

### Product information

Purification method:

Antigen affinity purification

Storage:

PBS with 0.1% sodium azide and 50% glycerol pH 7.3. Store at -20°C.