

## Allgemeine Informationen

<b>Katalog-Nr.:</b> 14597-1-AP	<b>GenBank-Zugangsnummer:</b> BC001063	<b>Reinigungsmethode:</b> Antigen-Affinitätsreinigung
<b>Größe:</b> 150ul , Konzentration: 900 µg/ml von Nanodrop und 400 µg/ml durch die Bradford-Methode mit BSA als Standard;	<b>GeneID (NCBI):</b> 3148	<b>Empfohlene Verdünnungen:</b> WB 1:500-1:3000 IP 0.5-4.0 ug für IP und 1:500-1:1000 für WB
<b>Wirt:</b> Kaninchen	<b>Vollständiger Name:</b> high-mobility group box 2	<b>IHC 1:50-1:500</b> <b>IF 1:50-1:500</b>
<b>Isotyp:</b> IgG	<b>Berechnete Masse:</b> 24 kDa	
<b>Immunogen Katalognummer:</b> AG6135	<b>Beobachtete Masse:</b> 33-35 kDa	

## Anwendungen

### Geprüfte Anwendungen:

IF, IHC, IP, WB, ELISA

### In Publikationen genannte Anwendungen:

WB

### Getestete Reaktivität:

Human, Maus, Ratte

### Zitierte Arten:

Human, Maus, Ratte

**Hinweis-IHC: Antigendemaskierung mit TE-Puffer pH 9,0 empfohlen. (\*) Wahlweise kann die Antigendemaskierung auch mit Citratpuffer pH 6,0 erfolgen.**

### Positivkontrollen:

**WB:** Jurkat-Zellen, HEK-293-Zellen, HL-60-Zellen, humanes Cerebellum-Gewebe, K-562-Zellen

**IP:** HEK-293-Zellen,

**IHC:** Maushirngewebe,

**IF:** HepG2-Zellen,

## Hintergrundinformationen

High mobility group protein B2 (HMGB2) belongs to a family of highly conserved proteins that contain HMG box domains (11246022,14871457). 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 (14871457). HMGB2 is widely expressed during embryonic development, but it is restricted to lymphoid organs and testis in adult animals (11262228). HMGB3 is only expressed during embryogenesis (9598312). 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. 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 and HMGB2 facilitate the binding of Hox proteins, Oct proteins, p53, Rel proteins, and steroid hormone receptor proteins to their target gene promoters (11246022,14871457). Furthermore, HMGB2 interacts with RAG1 to facilitate RAG complex binding to the recombinant signal sequence (RSS) and stimulate DNA-bending and subsequent VDJ cleavage at antigen receptor genes (19317908,10490593). In addition to their functions in the nucleus, HMGB proteins play a significant role in extracellular signaling associated with inflammation. HMGB2 is secreted by myeloid cells and promotes proliferation and migration of endothelial cells by binding to the receptor for advanced glycation endproducts (RAGE) (19811285). Research studies have shown that HMGB2 overexpression in hepatocellular carcinoma is associated with poor prognosis and shorter survival time (20851854). This antibody recognizes the phosphorylation form of HMGB2 protein. The calculated molecular weight of HMGB2 is 24 kDa, but the post-modification of HMGB2 is about 33-35 kDa. (PMID: 18218727)

## Bemerkenswerte Veröffentlichungen

Verfasser	Pubmed ID	Journal	Anwendung
Yiyong Wang	34699756	Eur J Pharmacol	WB
Guangfei Cui	30296520	Hum Pathol	WB,IHC
Kaiwen Zhang	34050127	Cell Death Dis	WB

## Lagerung

### Lagerungsbedingungen:

Bei -20°C lagern. Nach dem Versand ein Jahr lang stabil

### Lagerungspuffer:

PBS mit 0.02% Natriumazid und 50% Glycerin pH 7.3.

Aliquotieren ist nicht notwendig bei -20°C Lagerung

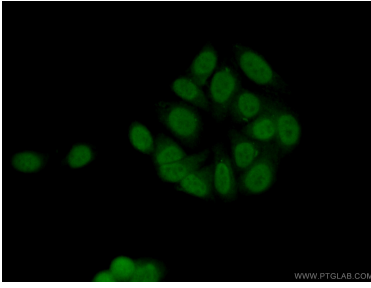
\*\*\* 20ul-Größen enthalten 0.1% BSA

T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free  
in USA), or 1(312) 455-8498 (outside USA)

E: [proteintech@ptglab.com](mailto:proteintech@ptglab.com)  
W: [ptglab.com](http://ptglab.com)

Group brand and is not available to purchase from any  
other manufacturer.

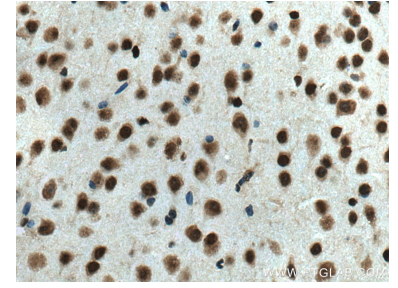
## Ausgewählte Validierungsdaten



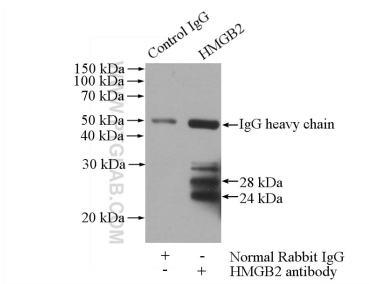
Immunofluorescent analysis of (4% PFA) fixed HepG2 cells using 14597-1-AP (HMGB2 antibody) at dilution of 1:50 and Alexa Fluor 488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).



Jurkat cells were subjected to SDS PAGE followed by western blot with 14597-1-AP (HMGB2 antibody) at dilution of 1:600 incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffin-embedded mouse brain tissue slide using 14597-1-AP (HMGB2 antibody) at dilution of 1:100 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



IP Result of anti-HMGB2 (IP:14597-1-AP, 4ug; Detection:14597-1-AP 1:500) with HEK-293 cells lysate 1200ug.