

## Basic Information

<b>Product Name</b>	Anti-HMGB2 Antibody	
<b>Gene Name</b>	HMGB2	
<b>Source</b>	Rabbit	
<b>Clonality</b>	Polyclonal	
<b>Isotype</b>	IgG	
<b>Species Reactivity</b>	human, mouse, rat	
<b>Tested Application</b>	WB, IHC, IF, ICC/IF, FCM	
<b>Contents</b>	500 ug/ml antibody with PBS, 0.02% NaN3, 1 mg/ml BSA and 50% glycerol.	
<b>Immunogen</b>	A synthetic peptide corresponding to a sequence at the N-terminus of human HMGB2, identical to the related mouse and rat sequences.	
<b>Concentration</b>	500 ug/ml	
<b>Purification</b>	Immunogen affinity purified.	
<b>Observed MW</b>	24 kDa	
<b>Dilution Ratios</b>	Western blot (WB): Immunohistochemistry (IHC): Immunofluorescence (IF): Immunocytochemistry/Immunofluorescence (ICC/IF): Flow Cytometry (Fixed): (Boiling the paraffin sections in 10mM citrate buffer,pH6.0,or PH8.0 EDTA repair liquid for 20 mins is required for the staining of formalin/paraffin sections.) Optimal working dilutions must be determined by end user.	1:500-2000 1:50-400 1:50-400 1:50-400 1:50-200

## Storage

12 months from date of receipt, -20°C as supplied.

## Background Information

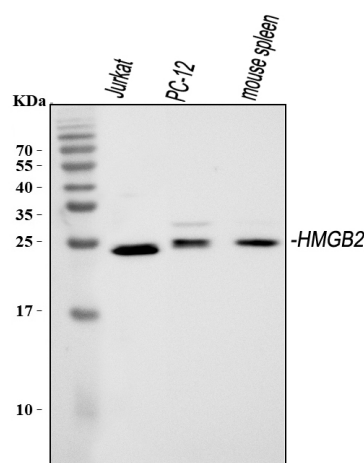
High-mobility group protein B2, also known as high-mobility group protein 2 (HMG-2), is a protein that in humans is encoded by the HMGB2 gene. This gene encodes a member of the non-histone chromosomal high mobility group protein family. The proteins of this family are chromatin-associated and ubiquitously 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.

## Reference

Anti-HMGB2 Antibody被引用在1文献中。

## Selected Validation Data



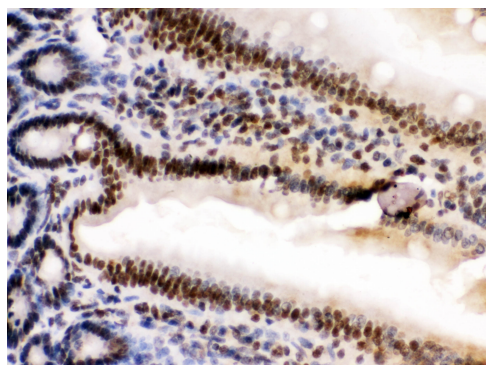
Western blot analysis of HMGB2 using anti-HMGB2 antibody (PB10002). The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

Lane 1: human Jurkat whole cell lysates,

Lane 2: rat PC-12 whole cell lysates,

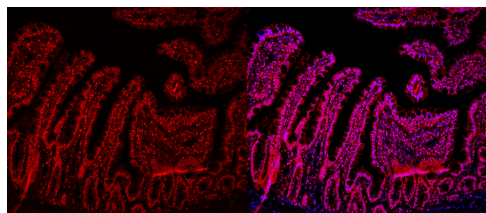
Lane 3: mouse spleen tissue lysates.

After electrophoresis, proteins were transferred to a membrane. Then the membrane was incubated with rabbit anti-HMGB2 antigen affinity purified polyclonal antibody (PB10002) at a dilution of 1:1000 and probed with a goat anti-rabbit IgG-HRP secondary antibody (Catalog # BA1054). The signal is developed using ECL Plus Western Blotting Substrate (Catalog # AR1197). A specific band was detected for HMGB2 at approximately 24 kDa. The expected band size for HMGB2 is at 24 kDa.

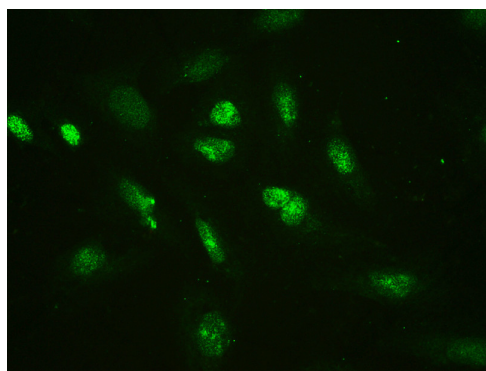


IHC analysis of HMGB2 using anti-HMGB2 antibody (PB10002).

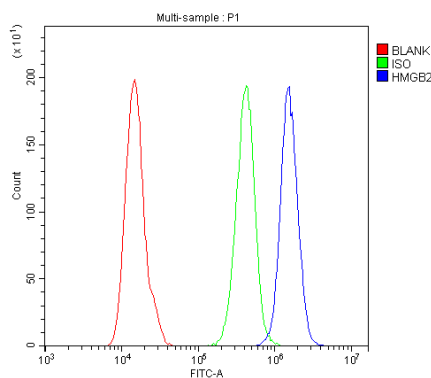
HMGB2 was detected in a paraffin-embedded section of mouse intestine tissue. The tissue section was incubated with rabbit anti-HMGB2 Antibody (PB10002) at a dilution of 1:200 and developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit (Catalog # SV0002) with DAB (Catalog # AR1027) as the chromogen.



IF analysis using anti- HMGB2 antibody (PB10002). detected in paraffin-embedded section of rat intestine tissue. The tissue section were stained using the cy3-conjugated Anti-rabbit IgG Secondary Antibody (red)(Catalog#BA1032) and counterstained with DAPI (blue).



ICC/IF analysis of HMGB2 using anti-HMGB2 antibody (PB10002). HMGB2 was detected in an immunocytochemical section of U2OS cells. The section was incubated with rabbit anti-HMGB2 Antibody (PB10002) at a dilution of 1:100. Fluoro488 Conjugated Goat Anti-Rabbit IgG (Green) (Catalog # BA1127) was used as secondary antibody.



Flow Cytometry analysis of A431 cells using anti-HMGB2 antibody (PB10002).

Overlay histogram showing A431 cells stained with PB10002 (Blue line). To facilitate intracellular staining, cells were fixed with 4% paraformaldehyde and permeabilized with permeabilization buffer. The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-HMGB2 Antibody (PB10002) at 1:100 dilution for 30 min at 20°C. Fluoro488 conjugated goat anti-rabbit IgG (BA1127) was used as secondary antibody at 1:100 dilution for 30 minutes at 20°C. Isotype control antibody (Green line) was rabbit IgG at 1:100 dilution used under the same conditions. Unlabelled sample without incubation with primary antibody and secondary antibody (Red line) was used as a blank control.