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## Anti-HMGB1 Purified

**Catalog Number:** 14-9900

**RUO: For Research Use Only. Not for use in diagnostic procedures.**

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### Product Information



**Contents:** Anti-HMGB1 Purified

**Catalog Number:** 14-9900

**Clone:** Polyclonal

**Concentration:** 0.5 mg/mL

**Host/Isotype:** Rabbit IgG



**LOT**



**Formulation:** aqueous buffer, 0.09% sodium azide, may contain carrier protein/stabilizer

**Temperature Limitation:** Store at 2-8°C.

**Batch Code:** Refer to vial

**Use By:** Refer to vial

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### Description

The polyclonal antibody recognizes High Mobility Group Box-1 (HMGB1), a nuclear non-histone chromatin binding protein that belongs to the HMG family. It is constitutively expressed by nucleated cells and regulates DNA transcription. HMGB-1 has also been found to play a role in innate immunity as an alarmin, or danger signal. It can be actively secreted by macrophages and dendritic cells in response to inflammatory stimuli or passive released by damaged or necrotic cells. In contrast, during apoptosis HMGB-1 remains sequestered in the nucleus via binding the chromatin irreversibly. In addition to its role as a DNA binding protein/transcription factor, it can also act similar to a cytokine playing a role in inflammation and proliferation. Signaling occurs through RAGE (Receptor for Advanced Glycation End products), as well as TLR2 and 4, thereby mediating the maturation and chemotaxis of monocytes and the production of pro-inflammatory cytokines. High circulating levels of HMGB-1 have been observed in cases of cancer, trauma, or autoimmunity.

This polyclonal antibody recognizes mouse, canine and human HMGB1. Based on conservation, it is likely to also see other species.

### Applications Reported

This antibody has been used for western blot of cell lysates and culture supernatants and immunocytochemical and immunohistochemical staining.

### Applications Tested

This polyclonal antibody has been tested by immunocytochemistry on paraformaldehyde fixed and permeabilized MDCK and HeLa cell lines and by western blot on cell lysates prepared from RAW264.7 and Jurkat cell lines. This antibody can be used at less than or equal to 1-5 µg/ml. It is recommended that this antibody be carefully titrated for optimal performance in the assay of interest.

### References

Klune JR, Dhupar R, Cardinal J, Billiar TR, Tsung A. HMGB1: endogenous danger signaling. *Mol Med.* 2008 Jul-Aug; 14(7-8): 476-84.

Voll RE, Urbonaviciute V, Herrmann M, Kalden JR. High mobility group box 1 in the pathogenesis of inflammatory and autoimmune diseases. *Isr Med Assoc J.* 2008 Jan; 10(1): 26-8.

Zhang S, Zhong J, Yang P, Gong F, Wang C. HMGB1, and innate alarmin, in the pathogenesis of type 1 diabetes. *Int J Clin Exp Pathol.* 2010; 3(1): 24-38.

### Related Products

00-4953 IHC /ICC Blocking Buffer - Low Protein

00-4954 20X TBS Wash Buffer for IHC/ICC

00-4958 Fluoromount-G™

11-4839 F(ab')<sub>2</sub> Anti-Rabbit IgG FITC (polyclonal)

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