

HMGB-1 Polyclonal Antibody

catalog number: D-AB-10375L

Note: Centrifuge before opening to ensure complete recovery of vial contents.

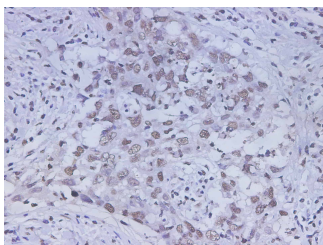
Description

Reactivity	Human
Immunogen	Recombinant Human HMGB-1 protein expressed by E.coli
Host	Rabbit
Isotype	IgG
Purification	Antigen Affinity Purification
Buffer	PBS with 0.05% Proclin300, 1% protective protein and 50% glycerol, pH7.4

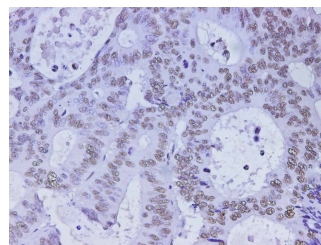
Applications Recommended Dilution

IHC	1:100-1:350
------------	-------------

Data



Immunohistochemistry of paraffin-embedded Human lung cancer using HMGB-1 Polyclonal Antibody at dilution of 1:350



Immunohistochemistry of paraffin-embedded Human colon cancer using HMGB-1 Polyclonal Antibody at dilution of 1:350

Preparation & Storage

Storage	Store at -20°C Valid for 12 months. Avoid freeze / thaw cycles.
Shipping	The product is shipped with ice pack, upon receipt, store it immediately at the temperature recommended.

Background

For Research Use Only

Human High-mobility group box 1 protein (HMGB1), previously known as HMG-1 or amphoterin, is a member of the high mobility group box family of non-histone chromosomal proteins. Human HMGB1 is expressed as a 30 kDa, 215 amino acid (aa) single chain polypeptide containing three domains: two N-terminal globular, 70 aa positively charged DNA-binding domains (HMG boxes A and B), and a negatively charged 30 aa C-terminal region that contains only Asp and Glu. Residues 27-43 and 178-184 contain a NLS. Posttranslational modifications of the molecule have been reported, with acetylation occurring on as many as 17 lysine residues. HMGB1 is expressed at high levels in almost all cells. It was originally discovered as a nuclear protein that could bend DNA. Such bending stabilizes nucleosome formation and regulates the expression of select genes upon recruitment by DNA binding proteins. It is now known that HMGB1 can also act extracellularly, both as an inflammatory mediator that promotes monocyte migration and cytokine secretion, and as a mediator of T cell-dendritic cell interaction. The cytokine activity of HBMG1 is restricted to the HMGB box, while the A box is associated with the helix-loop-helix domain of transcription factors. HMBG1 is released in response to cell death and as a secretion product. Although HMBG-1 does not possess a classic signal sequence, it appears to be secreted as an acetylated form via secretory endolysosome exocytosis. Once secreted, HMGB1 transduces cellular signals through its high affinity receptor, RAGE and, possibly, TLR2 and TLR4. Human HMGB1 is 100% aa identical to canine HMGB1 and 99% aa identical to mouse, rat, bovine and porcine HMGB1, respectively.