

DESCRIPTION

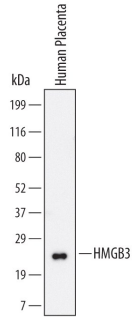
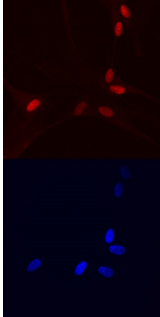
Species Reactivity	Human/Mouse
Specificity	Detects human and mouse HMGB3 in direct ELISAs and Western blots. In direct ELISAs and Western blots, no cross-reactivity with recombinant human HMG-1, A1A, A1B, or A2 is observed.
Source	Monoclonal Mouse IgG ₁ Clone # 546519
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	<i>E. coli</i> -derived recombinant human HMGB3 Met1-Glu180 Accession # O15347
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied as a 0.2 µm filtered solution in PBS.

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. *General Protocols* are available in the *Technical Information* section on our website.

	Recommended Concentration	Sample
Western Blot	2 µg/mL	See Below
Immunocytochemistry	8-25 µg/mL	See Below

DATA

<p>Western Blot</p>  <p>Detection of Human HMGB3 by Western Blot. Western blot shows lysates of human placenta tissue. PVDF Membrane was probed with 2 µg/mL of Human/Mouse HMGB3 Monoclonal Antibody (Catalog # MAB55071) followed by HRP-conjugated Anti-Mouse IgG Secondary Antibody (Catalog # HAF007). A specific band was detected for HMGB3 at approximately 23 kDa (as indicated). This experiment was conducted under reducing conditions and using Immoblot Buffer Group 1.</p>	<p>Immunocytochemistry</p>  <p>HMGB3 in Detroit 551 Human Cell Line. HMGB3 was detected in immersion fixed Detroit 551 human skin fibroblast cell line using Human/Mouse HMGB3 Monoclonal Antibody (Catalog # MAB55071) at 10 µg/mL for 3 hours at room temperature. Cells were stained using the NorthernLights™ 557-conjugated Anti-Mouse IgG Secondary Antibody (red, upper panel; Catalog # NL007) and counterstained with DAPI (blue, lower panel). Specific staining was localized to nuclei. View our protocol for Fluorescent ICC Staining of Cells on Coverslips.</p>
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PREPARATION AND STORAGE

Reconstitution	Sterile PBS to a final concentration of 0.5 mg/mL.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none"> ● 12 months from date of receipt, -20 to -70 °C as supplied. ● 1 month, 2 to 8 °C under sterile conditions after reconstitution. ● 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

High mobility group protein B3 (HMGB3; also HMG-4 and HMG-2a) is a 23 kDa nuclear protein and member of the HMGB family. Human HMGB3 is synthesized as a 200 amino acid (aa) precursor, which is demethylated to produce the 199 aa mature chain. The protein contains two HMG box DNA-binding domains (aa 9-79 and 93-161) and an acidic Asp/Glu-rich region (aa 181-200). Human HMGB3 shares 98% aa sequence identity with mouse and bovine HMGB3. HMGB3 is expressed predominantly in the placenta. It binds preferentially single-stranded DNA and unwinds double stranded DNA.