Datasheet for ABIN2666344

anti-HMGB1 antibody

2 Images

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Overview

Quantity:	100 µg
Target:	HMGB1
Reactivity:	Human, Mouse, Rat
Host:	Mouse
Clonality:	Monoclonal
Conjugate:	This HMGB1 antibody is un-conjugated
Application:	Intracellular Flow Cytometry (ICFC)

Product Details

Clone:	3E8
Isotype:	IgG2b kappa
Purification:	The antibody was purified by affinity chromatography.

Target Details

Target:	HMGB1
Alternative Name:	HMGB1 (HMGB1 Products)
Background:	High mobility group protein B1 (HMGB1) belongs to a family of highly conserved proteins that contain HMG box domains. Human HMGB1 is expressed as a 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. Human HMGB1 is 100 % aa identical to canine HMGB1 and 99 % aa

Target Details

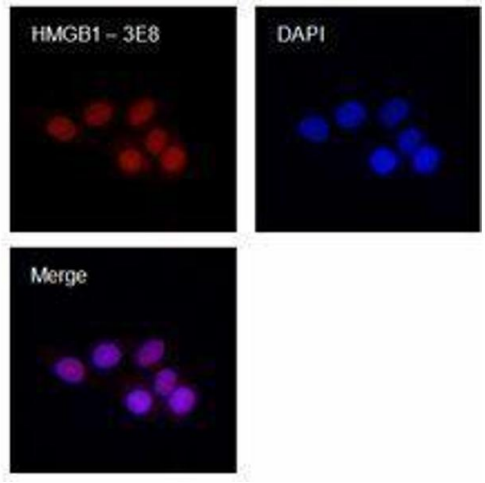
	identical to mouse, rat, bovine and porcine HMGB1. HMGB1 is a widely expressed and highly abundant protein. It was originally discovered as a nuclear protein that could bend DNA. Such bending stabilizes nucleosome formation and regulates the expression of select genes upon recruitment by DNA binding proteins. It is now known that HMGB1 also plays a significant role in extracellular signaling associated with inflammation. HMGB1 is massively released into the extracellular environment during cell necrosis. It acts as an inflammatory mediator that promotes monocyte migration and cytokine secretion, and as a mediator of T cell-dendritic cell interaction. In addition, activated monocytes, macrophages, and dendritic cells also secrete HMGB1, forming a positive feedback loop that results in the release of additional cytokines and neutrophils. The cytokine activity of HMGB1 is restricted to the HMG B box, while the A box is associated with the helix-loop-helix domain of transcription factors. Although HMGB1 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.
Pathways:	p53 Signaling, Regulation of Muscle Cell Differentiation, Skeletal Muscle Fiber Development, Positive Regulation of Endopeptidase Activity, Regulation of Carbohydrate Metabolic Process, Toll-Like Receptors Cascades, Smooth Muscle Cell Migration, Inflammasome

Application Details

Application Notes:	Optimal working dilution should be determined by the investigator.
Restrictions:	For Research Use only

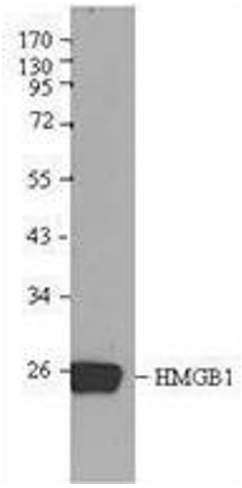
Handling

Concentration:	0.5 mg/mL
Buffer:	Phosphate-buffered solution, pH 7.2, containing 0.09 % sodium azide.
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	4 °C
Storage Comment:	Upon receipt, store undiluted between 2°C and 8°C.



Immunofluorescence

Image 1.



Western Blotting

Image 2.

