Datasheet for ABIN7140252

anti-HMGB1 antibody (AA 2-18) (Biotin)

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Overview

Quantity:	100 µL
Target:	HMGB1
Binding Specificity:	AA 2-18
Reactivity:	Rat
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This HMGB1 antibody is conjugated to Biotin
Application:	ELISA

Product Details

Immunogen:	Peptide sequence from Rat Hmgb1 protein (2-18AA)
Isotype:	IgG
Cross-Reactivity:	Rat
Purification:	>95%, Antigen Affinity purified & Affinity purified

Target Details

Target:	HMGB1
Alternative Name:	Hmgb1 (HMGB1 Products)
Background:	Background: Multifunctional redox sensitive protein with various roles in different cellular compartments. In the nucleus is one of the major chromatin-associated non-histone proteins

Target Details

	and acts as a DNA chaperone involved in replication, transcription, chromatin remodeling, V(D)J recombination, DNA repair and genome stability. Proposed to be an universal biosensor for nucleic acids. Promotes host inflammatory response to sterile and infectious signals and is involved in the coordination and integration of innate and adaptive immune responses. In the cytoplasm functions as sensor and/or chaperone for immunogenic nucleic acids implicating the activation of TLR9-mediated immune responses, and mediates autophagy. Acts as danger associated molecular pattern (DAMP) molecule that amplifies immune responses during tissue injury. Released to the extracellular environment can bind DNA, nucleosomes, IL-1 beta, CXCL12, AGER isoform 2/sRAGE, lipopolysaccharide (LPS) and lipoteichoic acid (LTA), and activates cells through engagement of multiple surface receptors. In the extracellular compartment fully reduced HMGB1 (released by necrosis) acts as a chemokine, disulfide HMGB1 (actively secreted) as a cytokine, and sulfonyl HMGB1 (released from apoptotic cells) promotes immunological tolerance (PubMed:23519706, PubMed:23446148, PubMed:23994764, PubMed:25048472). Has proangiogenic activity. May be involved in platelet activation. Binds to phosphatidylserine and phosphatidylethanolamide (PubMed:11154118). Bound to RAGE mediates signaling for neuronal outgrowth (PubMed:1885601, PubMed:2461949, PubMed:7592757, PubMed:12183440). May play a role in accumulation of expanded polyglutamine (polyQ) proteins. Aliases: Hmgb1 antibody, Hmg-1 antibody, Hmg1 antibody, High mobility group protein B1 antibody, Amphoterin antibody, Heparin-binding protein p30 antibody, High mobility group protein 1 antibody, HMG-1 antibody
UniProt:	P63159
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

Format:	Liquid
Buffer:	Preservative: 0.03 % Proclin 300

Handling

	Constituents: 50 % Glycerol, 0.01M PBS, PH 7.4
Preservative:	ProClin
Precaution of Use:	This product contains ProClin: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	-20 °C,-80 °C
Storage Comment:	Upon receipt, store at -20°C or -80°C. Avoid repeated freeze.