abcam

Product datasheet

Anti-HMGB2 antibody [EPR6302] - BSA and Azide free ab248543

KO VALIDATED Recombinant RabMAb

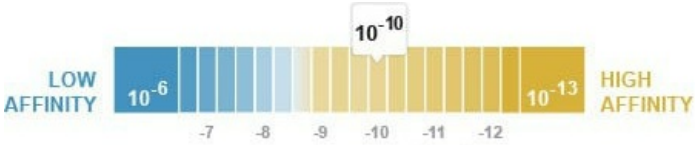
3 Images

Overview

Product name	Anti-HMGB2 antibody [EPR6302] - BSA and Azide free
Description	Rabbit monoclonal [EPR6302] to HMGB2 - BSA and Azide free
Host species	Rabbit
Tested applications	**Suitable for:** IHC-P, WB **Unsuitable for:** ICC/IF or IP
Species reactivity	**Reacts with:** Mouse, Rat, Human
Immunogen	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
Positive control	WB: HEK-293T, HAP1, HeLa and K562 cell lysate.
General notes	ab248543 is the carrier-free version of **ab133540**. Our **carrier-free** antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. The carrier-free buffer and high concentration allow for increased conjugation efficiency. This conjugation-ready format is designed for use with fluorochromes, metal isotopes, oligonucleotides, and enzymes, which makes them ideal for antibody labelling, functional and cell-based assays, flow-based assays (e.g. mass cytometry) and Multiplex Imaging applications. Use our **conjugation kits** for antibody conjugates that are ready-to-use in as little as 20 minutes with <1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold. This product is compatible with the Maxpar® Antibody Labeling Kit from Fluidigm, without the need for antibody preparation. Maxpar® is a trademark of Fluidigm Canada Inc. This product is a recombinant monoclonal antibody, which offers several advantages including: - High batch-to-batch consistency and reproducibility - Improved sensitivity and specificity - Long-term security of supply - Animal-free production For more information **see here**. Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to **RabMAb® patents**.

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C. Do Not Freeze.
Dissociation constant (K_D)	$K_D = 2.97 \times 10^{-10}$ M



Learn more about K_D

Storage buffer	pH: 7.2 Constituent: PBS
Carrier free	Yes
Purity	Protein A purified
Clonality	Monoclonal
Clone number	EPR6302
Isotype	IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab248543 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

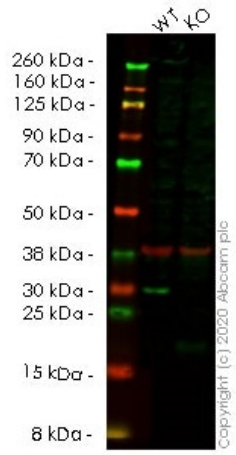
Application	Abreviews	Notes
IHC-P		Use at an assay dependent concentration. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.
WB		Use at an assay dependent concentration. Predicted molecular weight: 24 kDa.

Application notes Is unsuitable for ICC/IF or IP.

Target

Function	DNA binding proteins that associates with chromatin and has the ability to bend DNA. Binds preferentially single-stranded DNA. Involved in V(D)J recombination by acting as a cofactor of the RAG complex. Acts by stimulating cleavage and RAG protein binding at the 23 bp spacer of conserved recombination signal sequences (RSS).
Sequence similarities	Belongs to the HMGB family. Contains 2 HMG box DNA-binding domains.
Cellular localization	Nucleus. Chromosome.

Images



Western blot - Anti-HMGB2 antibody [EPR6302] - BSA and Azide free (ab248543)

All lanes : Anti-HMGB2 antibody [EPR6302] (**ab133540**) at 1/1000 dilution

Lane 1 : Wild-type HEK-293T cell lysate
Lane 2 : HMGB2 knockout HEK-293T cell lysate

Lysates/proteins at 20 µg per lane.

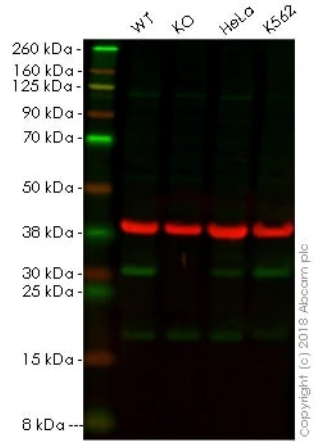
Performed under reducing conditions.

Predicted band size: 24 kDa
Observed band size: 24 kDa

This data was developed using the same antibody clone in a different buffer formulation (**ab133540**).

Lanes 1- 2: Merged signal (red and green). Green - **ab133540** observed at 24 kDa. Red - Anti-GAPDH antibody [6C5] - Loading Control (**ab8245**) observed at 37 kDa.

ab133540 was shown to react with HMGB2 in wild-type HEK-293T cells in western blot. Loss of signal was observed when knockout cell line **ab266358** (knockout cell lysate **ab257156**) was used. Wild-type HEK-293T and HMGB2 knockout HEK-293T cell lysates were subjected to SDS-PAGE. Membrane was blocked for 1 hour at room temperature in 0.1% TBST with 3% non-fat dried milk. **ab133540** and Anti-GAPDH antibody [6C5] - Loading Control (**ab8245**) overnight at 4°C at a 1 in 1000 dilution and a 1 in 20000 dilution respectively. Blots were developed with Goat anti-Rabbit IgG H&L (IRDye®800CW) preadsorbed (**ab216773**) and Goat anti-Mouse IgG H&L (IRDye®680RD) preadsorbed (**ab216776**) secondary antibodies at 1 in 20000 dilution for 1 hour at room temperature before imaging.



Western blot - Anti-HMGB2 antibody [EPR6302] - BSA and Azide free (ab248543)

All lanes : Anti-HMGB2 antibody [EPR6302] (**ab133540**) at 1/1000 dilution

Lane 1 : Wild-type HAP1 whole cell lysate
Lane 2 : HMGB2 knockout HAP1 whole cell lysate
Lane 3 : HeLa cell lysate
Lane 4 : K562 cell lysate

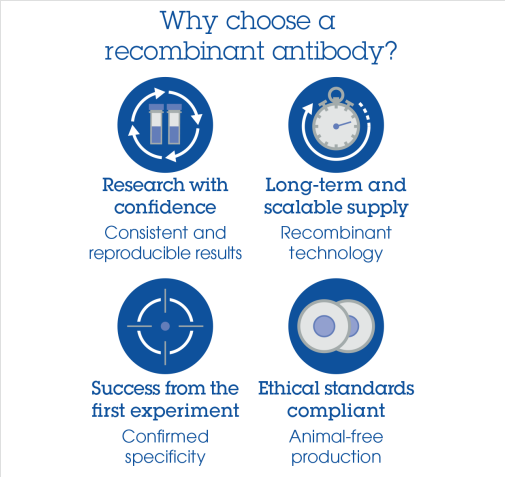
Lysates/proteins at 20 µg per lane.

Predicted band size: 24 kDa

This data was developed using the same antibody clone in a different buffer formulation (**ab133540**).

Lanes 1 - 4: Merged signal (red and green). Green - **ab133540** observed at 24 kDa. Red - loading control, **ab9484**, observed at 37 kDa.

ab133540 was shown to recognize HMGB2 in wild-type HAP1 cells as signal was lost at the expected MW in HMGB2 knockout cells. Additional cross-reactive bands were observed in the wild-type and knockout cells. Wild-type and HMGB2 knockout samples were subjected to SDS-PAGE. Ab133540 and **ab9484** (Mouse anti GAPDH loading control) were incubated overnight at 4°C at 1000 dilution and 1/20000 dilution respectively. Blots were developed with Goat anti-Rabbit IgG H&L (IRDye® 800CW) preabsorbed **ab216773** and Goat anti-Mouse IgG H&L (IRDye® 680RD) preabsorbed **ab216776** secondary antibodies at 1/20000 dilution for 1 hour at room temperature before imaging.



Anti-HMGB2 antibody [EPR6302] - BSA and Azide free (ab248543)

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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