abcam

ab53570

Anti-MAX antibody [73C5a]

Key facts

Isotype	IgG2b
Host species	Mouse
Storage buffer	pH: 7.4 Preservative: 0.05% Sodium azide Constituents: PBS, 1% BSA, 0.812% Sodium chloride, 0.1312% Sodium phosphate, 0.03% Tripotassium orthophosphate, 0.0225% Potassium chloride
Form	Liquid
Clonality	Monoclonal
Immunogen	Recombinant Fragment Protein within Human MAX. The exact immunogen used to generate this antibody is proprietary information. Database link P61244
Clone number	73C5a
Purification technique	Affinity purification Protein G
Concentration	0.1 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →
Purification notes	ab53570 was purified using protein G column chromatography from culture supernatant of hybridoma cultured in a medium containing bovine IgG-depleted (approximately 95%) fetal bovine serum and filtered through a 0.22µm membrane.

Reactivity data

ChIP

Expected

Species	Human
Dilution info	Use at an assay dependent concentration.

Notes	-

Not recommended

Species	Recombinant fragment, Recombinant full length protein - Human
Dilution info	-
Notes	-

Flow Cyt

Tested

Species	Human
Dilution info	1 µg for 10^6 Cells
Notes	ab170192 - Mouse monoclonal IgG2b, is suitable for use as an isotype control with this antibody.

Not recommended

Species	Recombinant fragment, Recombinant full length protein - Human
Dilution info	-
Notes	-

Dot

Expected

Species	Recombinant fragment
Dilution info	Use at an assay dependent concentration.
Notes	-

Predicted

Species	Human
Dilution info	-
Notes	-

Not recommended

Species	Recombinant full length protein - Human
Dilution info	-
Notes	-

WB

Tested

Species	Recombinant full length protein - Human
Dilution info	-
Notes	-

Expected

Species	Human
Dilution info	Use at an assay dependent concentration.
Notes	-

Not recommended

Species	Recombinant fragment
Dilution info	-
Notes	-

Target data

See full target information MAX

Function Transcription regulator. Forms a sequence-specific DNA-binding protein complex with MYC or MAD which recognizes the core sequence 5'-CAC[GA]TG-3'. The MYC:MAX complex is a transcriptional activator, whereas the MAD:MAX complex is a repressor. May repress transcription via the recruitment of a chromatin remodeling complex containing H3 'Lys-9' histone methyltransferase activity. Represses MYC transcriptional activity from E-box elements.

Storage

Shipped at conditions	Blue Ice
Appropriate short-term storage duration	1-2 weeks
Appropriate short-term storage conditions	+4°C
Appropriate long-term storage conditions	-20°C
Aliquoting information	Upon delivery aliquot
Storage information	Avoid freeze / thaw cycle

Supplementary info

This supplementary information is collated from multiple sources and compiled automatically.

Activity summary	The MAX protein also known as Myc-associated factor X functions mechanically as a transcription factor with a molecular weight of approximately 20 kDa. MAX is expressed in a wide range of tissues throughout the body. The protein forms homodimers or heterodimers with other members of the basic-helix-loop-helix-zipper (bHLHZ) family such as MYC MAD and MNT. The dimerization with different partners determines its role as an activator or repressor of transcription affecting the regulation of various genes.
Biological function summary	The MAX protein plays a significant role in controlling cell growth differentiation and apoptosis. The protein often forms part of complex regulatory networks within the cell. By interacting with different partner proteins MAX modulates transcriptional activity affecting cellular outcomes. Importantly it can switch between activating or repressing target genes depending on the dimer partner influencing processes such as proliferation and differentiation.
Pathways	MAX is deeply integrated into the MYC-MAX-MAD pathway an important pathway for regulating gene expression linked to cell cycle and proliferative processes. Within this pathway MAX pairs with either MYC or MAD depending on the cellular context to influence transcription. When paired with MYC it promotes transcription while pairing with MAD results in transcriptional repression. Additionally in the growth signaling pathway the MAX protein's regulation of target genes is pivotal for ensuring proper cellular responses to growth signals.
Associated diseases and disorders	The malfunction of the MAX protein has a strong association with cancer and neurodegenerative diseases. Alterations in MAX function can lead to uncontrolled cell growth contributing to oncogenesis particularly in relation to MYC which is a known oncogene. Furthermore dysregulation of the MAX protein is linked to neurodegenerative disorders where abnormal MAX activity may disrupt normal neural gene expression enhancing disease progression.

Product promise

Tested

We have tested this species and application combination and it works. It is covered by our product promise.

Expected

We have not tested this specific species and application combination in-house, but expect it will work. It is covered by our product promise.

Predicted

This species and application combination has not been tested, but we predict it will work based on strong homology. However, this combination is not covered by our product promise.

Not recommended

We do not recommend this combination. It is not covered by our product promise.

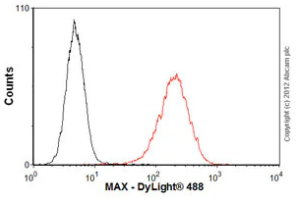
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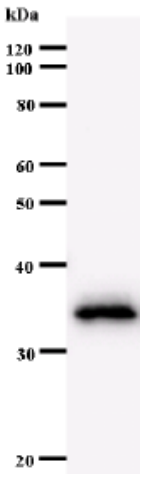
2 product images



Flow Cytometry - Anti-MAX antibody [73C5a] (ab53570)

MAX Flow Cytometry staining using mouse Anti-MAX antibody

Overlay histogram showing A549 cells stained with ab53570 (red line). The cells were fixed with 80% methanol (5 min) and then permeabilized with 0.1% PBS-Tween for 20 min. The cells were then incubated in 1x PBS / 10% normal goat serum / 0.3M glycine to block non-specific protein-protein interactions followed by the antibody (ab53570, 1µg/1x10^6 cells) for 30 min at 22°C. The secondary antibody used was DyLight® 488 goat anti-mouse IgG (H+L) (ab96879) at 1/500 dilution for 30 min at 22°C. Isotype control antibody (black line) was mouse IgG2b [PLPV219] (ab91366, 2µg/1x10^6 cells) used under the same conditions. Acquisition of >5,000 events was performed. This antibody gave a positive signal in A549 cells fixed with 4% paraformaldehyde (10 min)/permeabilized with 0.1% PBS-Tween for 20 min used under the same conditions.



Western blot - Anti-MAX antibody [73C5a] (ab53570)

MAX Western blot staining of immunised recombinant protein using mouse Anti-MAX antibody

All lanes:
Western blot - Anti-MAX antibody [73C5a] (ab53570)

All lanes:
immunised recombinant protein

Predicted band size: 18 kDa

Observed band size: 34 kDa

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.