abcam

Product datasheet

Anti-Cytokeratin 8 antibody [C-43] ab2530

11 References   4 Images

Overview

Product name	Anti-Cytokeratin 8 antibody [C-43]
Description	Mouse monoclonal [C-43] to Cytokeratin 8
Host species	Mouse
Specificity	This antibody recognises the 52.5kDa Cytokeratin 8.
Tested applications	**Suitable for:** WB, ICC/IF, IHC-P, Flow Cyt (Intra)
Species reactivity	**Reacts with:** Human
	Predicted to work with: Sheep, Rabbit, Cow, Pig ⚠ **Does not react with:** Mouse, Rat, Chicken, Hamster, Xenopus laevis
Immunogen	Tissue, cells or virus corresponding to Human Cytokeratin 8. Cytoskeleton preparation from HeLa human cervix carcinoma cell line
Positive control	IHC-P: Human lung FFPE tissue sections. ICC/IF: HepG2 cells WB: HeLa cell lysate Flow Cyt (Intra): MCF7 cells
General notes	The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing. If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&As

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C or -80°C. Avoid freeze / thaw cycle.
Storage buffer	pH: 7.40 Preservative: 0.097% Sodium azide Constituent: PBS
Purity	Protein A purified
Purification notes	Purified from tissue culture supernatant. Purity >95% by SDS-PAGE.

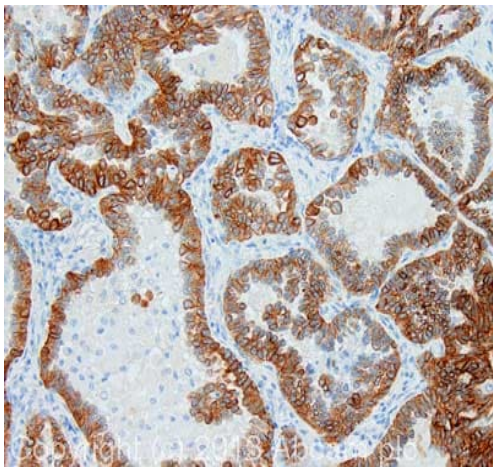|	
Clonality	Monoclonal
Clone number	C-43
Isotype	IgG1

Applications

The Abpromise guarantee   Our **Abpromise guarantee** covers the use of ab2530 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
WB		Use at an assay dependent concentration. Predicted molecular weight: 52.5 kDa.
ICC/IF		Use at an assay dependent concentration.
IHC-P		Use a concentration of 10 µg/ml.
Flow Cyt (Intra)		Use a concentration of 1 - 5 µg/ml. **ab170190** - Mouse monoclonal IgG1, is suitable for use as an isotype control with this antibody.

Target

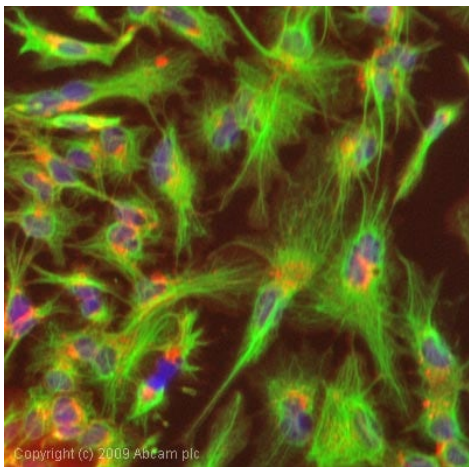|	
Function	Together with KRT19, helps to link the contractile apparatus to dystrophin at the costameres of striated muscle.
Tissue specificity	Observed in muscle fibers accumulating in the costameres of myoplasm at the sarcolemma membrane in structures that contain dystrophin and spectrin. Expressed in gingival mucosa and hard palate of the oral cavity.
Involvement in disease	Cirrhosis
Sequence similarities	Belongs to the intermediate filament family.
Post-translational modifications	Phosphorylation on serine residues is enhanced during EGF stimulation and mitosis. Ser-74 phosphorylation plays an important role in keratin filament reorganization. O-glycosylated. O-GlcNAcylation at multiple sites increases solubility, and decreases stability by inducing proteasomal degradation. O-glycosylated (O-GlcNAcylated), in a cell cycle-dependent manner.
Cellular localization	Cytoplasm. Nucleus, nucleoplasm. Nucleus matrix.

Images

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Cytokeratin 8 antibody [C-43] (ab2530)
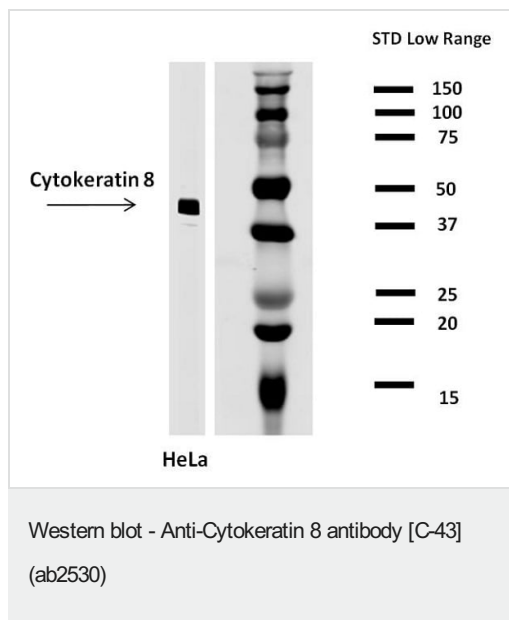
IHC image of ab2530 staining in human lung formalin fixed paraffin embedded tissue section, performed on a Leica Bond system using the standard protocol F. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH6, epitope retrieval solution 1) for 20 mins. The section was then incubated with ab2530, 5µg/ml, for 15 mins at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.

For other IHC staining systems (automated and non-automated) customers should optimize variable parameters such as antigen retrieval conditions, primary antibody concentration and antibody incubation times.
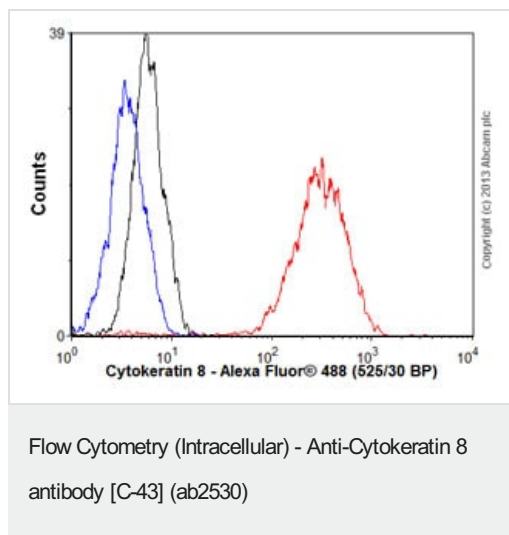

Immunocytochemistry/ Immunofluorescence - Anti-Cytokeratin 8 antibody [C-43] (ab2530)

ICC/IF image of ab2530 stained HepG2 cells. The cells were 100% methanol fixed (5 min) and then incubated in 1%BSA / 10% normal goat serum / 0.3M glycine in 0.1% PBS-Tween for 1h to permeabilise the cells and block non-specific protein-protein interactions. The cells were then incubated with the antibody (ab2530, 1µg/ml) overnight at +4°C. The secondary antibody (green) was Alexa Fluor® 488 goat anti-mouse IgG (H+L) used at a 1/1000 dilution for 1h. Alexa Fluor® 594 WGA was used to label plasma membranes (red) at a 1/200 dilution for 1h. DAPI was used to stain the cell nuclei (blue) at a concentration of 1.43µM.

Anti-Cytokeratin 8 antibody [C-43] (ab2530) at 2 µg/ml + HeLA cell lysate

Predicted band size: 52.5 kDa

Western blot - Anti-Cytokeratin 8 antibody [C-43] (ab2530)

Overlay histogram showing MCF7 cells stained with ab2530 (red line). The cells were fixed with 4% paraformaldehyde (10 min) and then permeabilized with 0.1% PBS-Triton X-100 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 (ab2530, 0.1µg/1x10^6 cells) for 30 min at 22°C. The secondary antibody used was Alexa Fluor® 488 goat anti-mouse IgG (H+L) (**ab150113**) at 1/2000 dilution for 30 min at 22°C. Isotype control antibody (black line) was mouse IgG1 [ICIGG1] (**ab91353**, 1µg/1x10^6 cells) used under the same conditions. Unlabelled sample (blue line) was also used as a control. Acquisition of >5,000 events were collected using a 20mW Argon ion laser (488nm) and 525/30 bandpass filter. This antibody gave a positive signal in MCF7 cells fixed with 80% methanol (5 min)/permeabilized with 0.1% PBS-Triton X-100 for 20 min used under the same conditions.

Flow Cytometry (Intracellular) - Anti-Cytokeratin 8 antibody [C-43] (ab2530)

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