

Product datasheet

Anti-Nodal antibody [5C3] ab55676

★★★★☆ [5 Abreviews](#) [21 References](#) [4 Images](#)

Overview

Product name	Anti-Nodal antibody [5C3]
Description	Mouse monoclonal [5C3] to Nodal
Host species	Mouse
Tested applications	Suitable for: WB, IHC-P, ICC/IF, Flow Cyt
Species reactivity	Reacts with: Mouse, Human
Immunogen	Recombinant fragment: RCEGECNPV GEEFHPTNHA YIQSLLKRYQ PHRVPSTCCA PVKTKPLSML YVDNGRVLLD HHKDMVVEEC GC, corresponding to amino acids 275-347 of Human Nodal Run BLAST with ExPASy Run BLAST with NCBI

General notes

This product was changed from ascites to tissue culture supernatant on 28th May 2019. Please note that the dilutions may need to be adjusted accordingly. If you have any questions, please do not hesitate to contact our scientific support team.

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. Upon delivery aliquot and store at -20°C or -80°C. Avoid repeated freeze / thaw cycles.
Storage buffer	pH: 7.40 Constituent: 100% PBS
Purity	Protein A purified
Clonality	Monoclonal
Clone number	5C3
Isotype	IgG1

Light chain type

kappa

Applications

The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab55676 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	★★★★★ (3)	Use at an assay dependent concentration. Predicted molecular weight: 40 kDa.
IHC-P	★★★★★ (1)	Use at an assay dependent concentration.
ICC/IF	★★★★★ (1)	Use at an assay dependent concentration.
Flow Cyt		Use at an assay dependent concentration. ab170190 - Mouse monoclonal IgG1, is suitable for use as an isotype control with this antibody.

Target

Function

Essential for mesoderm formation and axial patterning during embryonic development.

Involvement in disease

Defects in NODAL are the cause of visceral heterotaxy autosomal type 5 (HTX5) [MIM:270100]. A form of visceral heterotaxy, a complex disorder due to disruption of the normal left-right asymmetry of the thoracoabdominal organs. It results in an abnormal arrangement of visceral organs, and a wide variety of congenital defects. Clinical features of visceral heterotaxy autosomal type 5 include situs inversus viscerum or situs ambiguus, congenital heart defect, transposition of the great vessels ventricular septal defect, atrial septal defect, truncuscommunis, and dextrocardia.

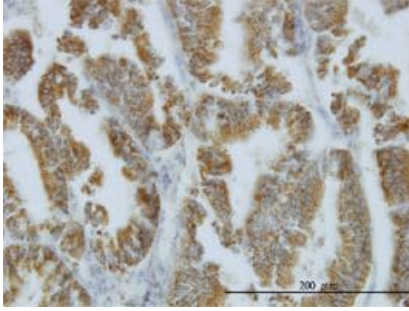
Sequence similarities

Belongs to the TGF-beta family.

Cellular localization

Secreted.

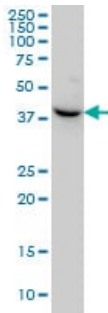
Images



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Nodal antibody [5C3] (ab55676)

Nodal antibody (ab55676) used in immunohistochemistry at 3ug/ml on formalin fixed and paraffin embedded human endometrium cancer.

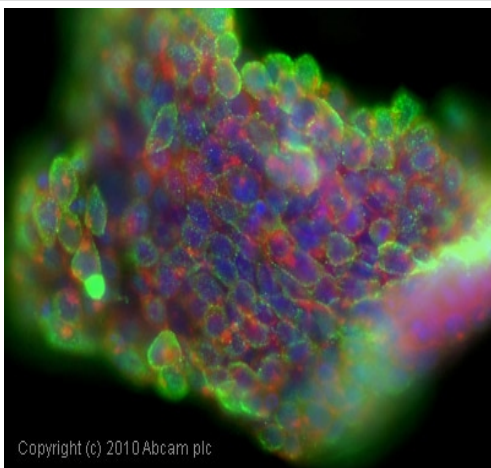
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Western blot - Anti-Nodal antibody [5C3] (ab55676)

Nodal antibody (ab55676) at 1ug/lane + HeLa cell lysate at 25ug/lane.

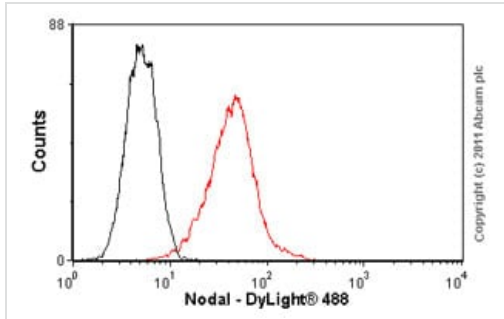
This image was generated using the ascites version of the product.



Immunocytochemistry/ Immunofluorescence - Anti-Nodal antibody [5C3] (ab55676)

ICC/IF image of ab55676 stained mouse embryonic stem cells. The cells were 4% formaldehyde fixed (10 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 (ab55676, 5µg/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.

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Flow Cytometry - Anti-Nodal antibody [5C3]
(ab55676)

Overlay histogram showing HEK293 cells stained with ab55676 (red line). The cells were fixed with 4% paraformaldehyde (10 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 (ab55676, 1 µg/1x10⁶ 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 IgG1 [ICIGG1] ([ab91353](#), 2 µg/1x10⁶ cells) used under the same conditions. Acquisition of >5,000 events was performed. This antibody gave a positive signal in HEK293 cells fixed with 100% methanol (5 min)/permeabilized in 0.1% PBS-Tween used under the same conditions.

This image was generated using the ascites version of the product.

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