

Product datasheet

Anti-Calcitonin antibody [16B5] ab11493

★★★★★ [2 Abreviews](#) [1 References](#) [5 Images](#)

Overview

Product name	Anti-Calcitonin antibody [16B5]
Description	Mouse monoclonal [16B5] to Calcitonin
Host species	Mouse
Specificity	This antibody recognises human procalcitonin and calcitonin. Specific for calcitonin (central part).
Tested applications	Suitable for: Sandwich ELISA, Flow Cyt, WB
Species reactivity	Reacts with: Human, Recombinant fragment
Immunogen	Recombinant fragment (Human).
Epitope	aa 72-81
General notes	<p>This product was changed from ascites to tissue culture supernatant on 13 June 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.</p> <p>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.</p> <p>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</p>

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.
Storage buffer	pH: 7.40 Preservative: 0.09% Sodium azide Constituent: PBS
Purity	Protein A purified
Purification notes	Purified from TCS.
Clonality	Monoclonal
Clone number	16B5

Myeloma	Sp2/0
Isotype	IgG2b

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab11493 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
Sandwich ELISA		Use at an assay dependent concentration. Can be paired for Sandwich ELISA with Rabbit polyclonal to Calcitonin (ab8553) . For sandwich ELISA, use this antibody as Capture at 5µg/ml with ab8553 as Detection.
Flow Cyt		Use at an assay dependent concentration. ab170192 - Mouse monoclonal IgG2b, is suitable for use as an isotype control with this antibody.
WB	★★★★★ (1)	Use at an assay dependent concentration. Predicted molecular weight: 15 kDa.

Target

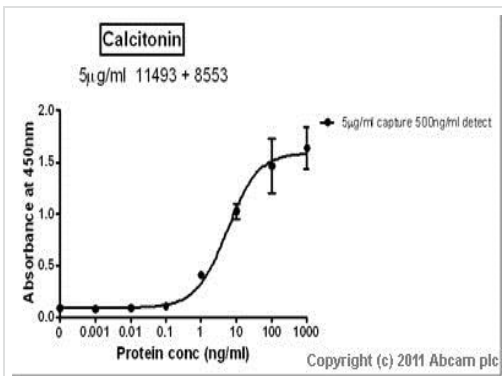
Relevance

Calcitonin is a 32 amino acid peptide hormone synthesized by the parafollicular cells of the thyroid. It causes a rapid, but short lived, reduction in serum calcium and phosphate by promoting the incorporation of those ions in the bones. This effect is opposite to that of parathyroid hormone. Staining for calcitonin may be used for the identification of a spectrum of C cell proliferative abnormalities ranging from C cell hyperplasia to invasive tumors. Staining for calcitonin in medullary carcinoma of the thyroid produces a fine granular pattern in the cytoplasm. Amyloid deposits within the tumor may also exhibit varying degrees of calcitonin activity.

Cellular localization

Cytoplasmic and Secreted

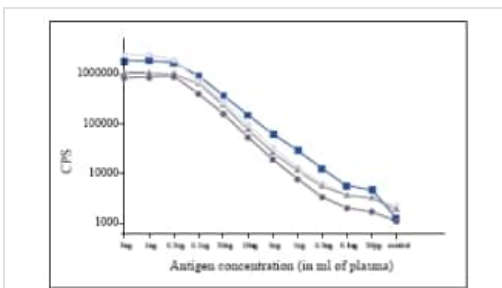
Images



Sandwich ELISA - Anti-Calcitonin antibody [16B5] (ab11493)

Standard Curve for Calcitonin dilution range 1pg/ml to 1ug/ml using Capture Antibody Mouse monoclonal [16B5] to Calcitonin (ab11493) at 5ug/ml and Detector Antibody Rabbit polyclonal to Calcitonin ([ab8553](#)) at 0.5ug/ml

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

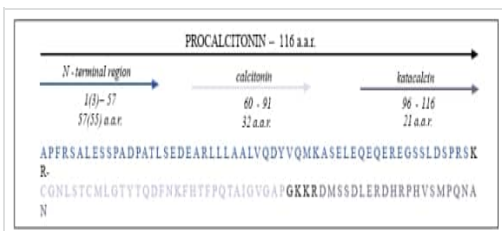


Sandwich ELISA - Anti-Calcitonin antibody [16B5] (ab11493)

Calibration curves of several procalcitonin sandwich ELISAs using a range of monoclonal antibodies available against procalcitonin, calcitonin and calcitonin fragments. Capture antibodies used at 1 µg/well and detection antibodies at 0.1 µg/well.

Dark blue square = ab11493 [16B5] (calcitonin fragment) and [ab11494](#) [42] (procalcitonin fragment). Light grey circle = [ab11497](#) [24B2] (calcitonin fragment) and [ab11484](#) [13B9] (calcitonin fragment). Grey triangle = [ab11487](#) [14C12] (calcitonin fragment) and [ab11496](#) [14A2] (calcitonin fragment). Dark grey circle = [ab14813](#) [27A3] (procalcitonin fragment) and [ab11491](#) [22A11] (calcitonin fragment).

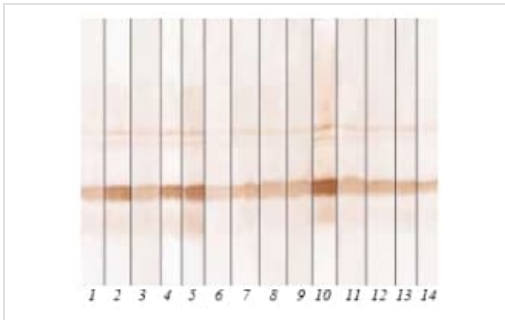
This image was generated using the ascites version of the product.



Schematic Diagram - Anti-Calcitonin antibody [16B5] (ab11493)

Amino acid sequence and schematic diagram of human procalcitonin and the N-terminal, calcitonin, and katecalcitonin (calcitonin) fragments.

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



Western blot - Anti-Calcitonin antibody [16B5] (ab11493)

Immunodetection of human recombinant procalcitonin in WB by a range of monoclonal antibodies available which detect different fragments of the protein, N-terminal, calcitonin or catacalcin, (see immunogen section and related figure).

Anti- N-terminal antibodies available; 1) **ab14816** [6F10], 2) **ab14813** [27A3], 3) **ab11498** [38F11], 4) **ab14817** [44D9], 5) **ab11494** [42],

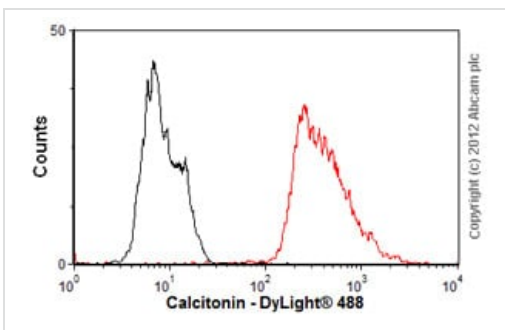
Anti- calcitonin antibodies available; 6) **ab11484** [13B9], 7) **ab14818** [13F2], 8) **ab14819** [13G11], 9) **ab11496** [14A2], 10) ab11493 [16B5], 11) **ab11497** [24B2],

Anti- catacalcin antibodies available; 12) **ab11487** [14C12], 13) **ab11490** [18B7], 14) **ab11491** [22A11].

Immunodetection of human recombinant procalcitonin in WB by a range of monoclonal antibodies available which detect different fragments of the protein, N-terminal, calcitonin or catacalcin, (see immunogen section and related figure).

Anti- N-terminal antibodies available; 1) **ab14816** [6F10], 2) **ab14813** [27A3], 3) **ab1149**

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



Flow Cytometry - Anti-Calcitonin antibody [16B5] (ab11493)

Overlay histogram showing SH-SY5Y cells stained with ab11493 (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 (ab11493, 1µg/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 IgG2b [PLPV219] (**ab91366**<, 2µg/1x10⁶ cells) used under the same conditions.

Acquisition of >5,000 events was performed. This antibody gave a positive signal in SH-SY5Y cells fixed with 4% paraformaldehyde (10 min)/permeabilized with 0.1% PBS-Tween for 20 min used under the same conditions.

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

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

Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet

- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours

- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit <https://www.abcam.com/abpromise> or contact our technical team.

Terms and conditions

- Guarantee only valid for products bought direct from Abcam or one of our authorized distributors