Product datasheet

Anti-Calcitonin antibody ab8553

Overview

Product name: Anti-Calcitonin antibody
Description: Rabbit polyclonal to Calcitonin
Host species: Rabbit
Tested applications: Suitable for: Sandwich ELISA, ELISA, IHC-FoFr, IHC-P, WB
Species reactivity: Reacts with: Human
Predicted to work with: Mouse, Rat, Sheep, Horse, Dog, Pig
Immunogen: Synthetic peptide corresponding to Calcitonin.
Database link: P01258
Positive control: Medullary carcinoma of the thyroid or thyroid c-cell hyperplasia.
General notes: Prolonged fixation in buffered formalin can destroy the epitope

Properties

Form: Liquid
Storage instructions: Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.
Storage buffer: pH: 7.60
Preservative: 0.1% Sodium azide
Constituents: 1% BSA, PBS
Purity: Immunogen affinity purified
Clonality: Polyclonal
Isotype: IgG
Light chain type: unknown

Applications

Our Abpromise guarantee covers the use of ab8553 in the following tested applications.
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.
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

### 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.

### Application

<table>
<thead>
<tr>
<th>Application</th>
<th>Abreviews</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sandwich ELISA</td>
<td>Use a concentration of 0.5 µg/ml. Can be paired for Sandwich ELISA with Mouse monoclonal [16B5] to Calcitonin (ab11493). For sandwich ELISA, use this antibody as Detection at 0.5µg/ml with ab11493 as Capture.</td>
<td></td>
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<tr>
<td>ELISA</td>
<td>1/300 - 1/3000.</td>
<td></td>
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<tr>
<td>IHC-FoFr</td>
<td>Use at an assay dependent concentration.</td>
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<tr>
<td>IHC-P</td>
<td>⭐⭐⭐⭐</td>
<td>1/75 - 1/150. Antigen retrieval is not essential but may optimise staining.</td>
</tr>
</tbody>
</table>

### Images

- 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
Anti-Calcitonin antibody (ab8553) at 1/25 dilution + Human thyroid lysate.

**Predicted band size:** 15 kDa  
**Observed band size:** 14 kDa  
**Additional bands at:** 40 kDa. We are unsure as to the identity of these extra bands.

Immunohistochemical analysis of human thyroid staining with ab8553.

**Please note:** All products are "FOR RESEARCH USE ONLY AND ARE NOT INTENDED FOR DIAGNOSTIC OR THERAPEUTIC USE"