

## **Rabbit anti-human Alpha-1-Antichymotrypsin Antibody (Polyclonal)**

### **References and presentations<sup>1</sup>**

- **ready-to-use (ml)**  
MAD-001213QD-3  
MAD-001213QD-7  
MAD-001213QD-12
- **MD-Stainer presentations<sup>2</sup>**  
MAD-001213QD-3/V  
MAD-001213QD/V
- **concentrated**  
MAD-001213Q - 1:100 recommended dilution

**Composition:** anti-human Alpha-1-Antichymotrypsin rabbit polyclonal antibody purified from serum and prepared in 10mM PBS, pH 7.4, with 0.2% BSA and 0.09% sodium azide

**Intended use<sup>IVD</sup>:** Immunohistochemistry (IHC) on paraffin embedded tissues. Not tested on frozen tissues or Western-Blotting

**Clone:** Polyclonal

**Ig isotype:** Rabbit IgG

**Immunogen:** Purified alpha-1-antichymotrypsin from human serum.

**Species reactivity:** In vitro diagnostics in humans. Not tested in other species

### **Description and applications:**

This antibody reacts with the human alpha-1-antichymotrypsin, a surfactant protein in acute phase of the inflammation, plus a serpin that inactivates preferably the chymotrypsin, the cathepsin G and the chymase.

As an inhibitor protein of serine protease, it is closely related to the neuritic plaques in the Alzheimer's disease and in human and monkey brains with normal aging signs. The regulation of serine proteases and their inhibitors have an important function in the neuromuscular pathology differential diagnosis. The alpha-1-antichymotrypsin binds primarily to the prostate specific antigen (PSA), a serine protease similar to the chymotrypsin, to form a complex. Furthermore, this antibody can be used to identify hematopoietic cells of the monocyte-macrophage series and neoplasias derived from them.

<sup>1</sup> These references are for presentation in vials of Low Density Polyethylene (LDPE) dropper. In case the products are used in automated stainers, a special reference is assigned as follows:

- / L: Cylindrical screw-cap vials (QD-3 / L, QD-7 / L, QD-12 / L).  
- / N: Polygonal screw-cap vials (QD-3 / N, QD-7 / N, QD-12 / N).

For different presentations (references / volumes) please contact the supplier.

<sup>2</sup> For Technical specifications for MD-Stainer, please contact your distributor.

**IHC positive control:** Macrophages in the tonsils.

**Visualization:** Cytoplasmic.

### **IHC recommended procedure:**

- 4µm thick section should be taken on charged slides; dry overnight at 60°C
- Deparaffinise, rehydrate and HIER (heat induced epitope retrieval) – boil tissue in the Pt Module using Master Diagnóstica EDTA buffer pH8<sup>3</sup> for 20 min at 95°C. Upon completion rinse with 3-5 changes of distilled or deionised water followed by cooling at RT for 20 min
- Endogenous peroxidase block - Blocking for 10 minutes at room temperature using peroxidase solution (ref. MAD-021540Q-125)
- Primary antibody: incubate for 10 minutes [The antibody dilution (when concentrated) and protocol may vary depending on the specimen preparation and specific application. Optimal conditions should be determined by the individual laboratory]
- For detection use Master Polymer Plus Detection System (HRP) (DAB included; ref. MAD-000237QK)
- Counterstaining with haematoxylin and final mounting of the slide

**Storage and stability:** ☞ up to 18 months; ❄ stored at 2-8°C. Do not freeze.

### **Warnings and precautions:**

1. Avoid contact of reagents with eyes and mucous membranes. If reagents come into contact with sensitive areas, wash with copious amounts of water.
2. This product is harmful if swallowed.
3. Consult local or state authorities with regard to recommended method of disposal.
4. Avoid microbial contamination of reagents.

### **SAFETY RECOMMENDATIONS**

This product is intended for laboratory professional use only. The product is NOT intended to be used as a drug or for domestic purposes. The current version of the Safety Data Sheet for this product can be downloaded by searching the reference number at [www.vitro.bio](http://www.vitro.bio) or can be requested at [regulatory.md@vitro.bio](mailto:regulatory.md@vitro.bio).

### **BIBLIOGRAPHY**

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<sup>3</sup> Ref: MAD-004072R/D



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5. Castellucci M; Theelen T; Pompili E; Fumagalli L; De Renzis G; Muhlhauser J. Immunohistochemical localization of serineprotease inhibitors in the human placenta. *Cell and Tissue Research*. 278(2):283-9 (1994).

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