

# PGP 9.5 (Polyclonal)

# Rabbit anti-human PGP 9.5 Antibody (Polyclonal)

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

- ready-to-use (manual or LabVision AutoStainer)
  MAD-000918QD–3
  MAD-000918QD–7
  MAD-000918QD–12
- Ready-to-use (MD-Stainer)<sup>2</sup> MAD-000918QD-3/V MAD-000918QD/V
- concentrated MAD-000918Q - 1:50 recommended dilution

**Composition:** anti-human PGP 9.5 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** The Immunohistochemistry (IHC) on paraffin embedded tissues. Not tested on frozen tissues or Western-Blotting

Clone: Polyclonal

Ig isotype: Rabbit IgG.

**Immunogen:** Recombinant protein corresponding to the total length of human protein PGP 9.5.

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

## **Description and applications:**

This antibody recognises a molecule with a molecular mass of 27 kDa known as "Protein Gene Product 9.5" or PGP 9.5 and encoded by the *UCHL1* (ubiquitin carboxy-terminal hydrolase L1 isoenzyme) gene, located in the chromosomal region 4p13. This protein catalyses the hydrolysis of ubiquitin's C-terminal esters and amides, playing an important role in protein degradation. Overexpression of the *UCHL1* gene occurs in several neoplasms, including leukaemias, carcinomas, and several tumours of mesenchymal origin.

In normal tissues, PGP 9.5, which shows mainly a cytoplasmic staining pattern, is present in neurons and nerve fibres of the central and peripheral nervous systems, as well as in numerous neuroendocrine cells,

except those of the digestive tract, of which only the pancreatic islets of Langerhans show consistent positive staining. Other normal tissues that are usually stained are segments of renal tubules, spermatogonias and Leydig cells, smooth muscle, and germinal centres.

Although this antibody is a sensitive marker of nerve cells and nerve sheaths, it is not completely specific and, in addition to immunostaining of astrocytomas, schwannomas, neurofibromas (100%), perineuriomas (100%), malignant peripheral nerve sheath tumours (70%), and neurothekeomas, other neoplasms are moderately or strongly positive; these include carcinoid tumours, small cell lung carcinoma, mesothelioma, granular cell tumours, and different mesenchymal tumours: myo/fibroblastic tumours (70% of malignant fibrous histiocytomas), low grade fibromyxoid sarcomas (90%), fibromatosis (100%), desmoplastic fibroblastoma. Its positivity in the fibroblasts of the desmoplastic stroma of advanced stage colorectal carcinoma has a prognostic value, suggesting a shorter survival and more frequent Vascular tumours (angiosarcomas, recurrences. hemangioendotheliomas, hemangiomas), as well as pleomorphic liposarcomas, dermatofibrosarcoma protuberans, rhabdomyosarcomas, synovial sarcoma, and some melanomas, also display staining with this antibody.

**IHC positive control**: Pancreas or normal colon tissue section.

Visualization: Cytoplasmic and nuclear.

## IHC recommended procedure:

- $4\mu m$  thick section should be taken on charged slides; dry overnight at  $60^{\circ}C$
- Deparaffinise, rehydrate and HIER (heat induced epitope retrieval) boil tissue in the Pt Module using Vitro S.A 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



<sup>&</sup>lt;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).

 <sup>/</sup> 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.

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

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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:** A Stored at 2-8°C. Do not freeze. Once the packaging has been opened it can be stored until the expiration date of the reagent indicated on the label. If the reagent has been stored under other conditions to those indicated in this document, the user must first check its correct performance taking into account the product warranty is no longer valid.

#### 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 <u>www.vitro.bio</u> or can be requested at <u>regulatory@vitro.bio</u>.

## BIBLIOGRAPHY

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#### LABEL AND BOX SYMBOLS

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IVD

Explanation of the symbols of the product label and box:

$\sum$	Expiration date
×.	Temperature limit
	Manufacturer
Σ	Sufficient content for <n> assays</n>
REF	Catalog number
LOT	Lot code
ĺ	Refer to the instructions of use
IVD	Medical product for <i>in</i> vitro diagnosis.
e-SDS	Material safety data sheet



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