



Product Information Sheet

Polyclonal Anti-Protein tyrosine phosphatase, non-receptor type 11, **SHP-2 (PTPN11)**

Catalogue No. PA1114

Lot No. 08J01

Ig type: rabbit IgG

Size: 100µg/vial

Specificity

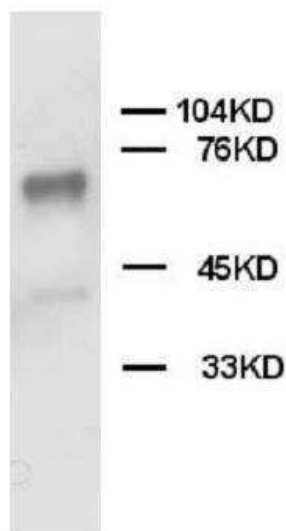
Human, rat, mouse.

No cross reactivity with other proteins.

Recommended application

Western blot

Immunohistochemistry(P)



Immunogen

A synthetic peptide mapping at the C-terminal of human SHP-2, identical to the related rat sequence.

Purity

Immunogen affinity purified.

Application

Western blot

At 1-2µg/ml with the appropriate system to detect SHP-2 in cells and tissues.

Immunohistochemistry(P)

At 1-2µg/ml to detect SHP-2 in formalin fixed and paraffin embedded tissues. Boiling the sections is required.

Other applications have not been tested.

Optimal dilutions should be determined by end user.

Contents

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na₂HPO₄, 0.05mg Thimerosal, 0.05mg NaN₃.

To reorder contact us at:

Antagene, Inc.

Toll Free: 1(866)964-2589

email: Info@antageneinc.com

Reconstitution

0.2ml of distilled water will yield a concentration of 500µg/ml.

FOR RESEARCH USE ONLY. NOT FOR DIAGNOSTIC AND CLINICAL USE.

Storage

month. It can also be aliquotted and stored frozen at -20°C for longer
At -20°C for one year. After time.
reconstitution, at 4°C for one

BACKGROUND

The tyrosine phosphatase Shp2 is recruited into tyrosine-kinase signalling pathways through binding of its two amino-terminal SH2 domains to specific phosphotyrosine motifs, concurrent with its re-localization and stimulation of phosphatase activity. Shp2 can potentiate signalling through the MAP-kinase pathway and is required during early mouse development for gastrulation. Shp2 is specifically required in mesenchyme cells of the progress zone (PZ), directly beneath the distal ectoderm of the limb bud. Rather than integrating proliferative signals, Shp2 probably exerts its effects on limb development by influencing cell shape, movement or adhesion. Furthermore, the branchial arches, which also use Fgfs during bud outgrowth, similarly require Shp2. Thus, Shp2 regulates phosphotyrosine-signalling events during the complex ectodermal-mesenchymal interactions that regulate mammalian budding morphogenesis.

REFERENCE

1. Saxton, T. M.; Ciruna, B. G.; Holmyard, D.; Kulkarni, S.; Harpal, K.; Rossant, J.; Pawson, T. : The SH2 tyrosine phosphatase Shp2 is required for mammalian limb development. *Nature Genet.* 24: 420-423, 2000.