

## Product datasheet for AP23324PU-N

# OriGene Technologies, Inc.

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### **SHP2 (PTPN11) Rabbit Polyclonal Antibody**

### **Product data:**

**Product Type:** Primary Antibodies

Applications: IHC, WB

**Recommended Dilution:** Western blot: 1-2 µg/ml with the appropriate system to detect SHP-2 in cells and tissues.

Immunohistochemistry on Paraffin Sections: 1-2 µg/ml to detect SHP-2 in formalin fixed and

paraffin embedded tissues.

Reactivity: Human, Mouse, Rat

Host: Rabbit Isotype: IgG

Clonality: Polyclonal

**Immunogen:** A synthetic peptide mapping at the C-terminal of Human SHP-2

**Specificity:** Recognizes SHP-2 (PTPN11).

Formulation: 5 mg BSA, 0.9 mg NaCl, 0.2 mg Na2HPO4, 0.05 mg Thimerosal and 0.05mg Sodium Azide

State: Aff - Purified

State: Lyophilized purified Ig fraction

**Reconstitution Method:** Restore with 0.2 ml of distilled water to yield a concentration of 0.5 mg/ml.

Purification: Immunoaffinity Chromatography

Conjugation: Unconjugated

**Storage:** Store the antibody at -20°C.

After reconstitution, store the antibody at 2-8°C for one month or (in aliquots) at -20°C for

longer.

Avoid repeated freezing and thawing.

**Stability:** Shelf life: one year from despatch.

**Gene Name:** protein tyrosine phosphatase, non-receptor type 11

Database Link: Entrez Gene 19247 MouseEntrez Gene 25622 RatEntrez Gene 5781 Human

Q06124





#### 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.

Synonyms: SHPTP2, PTP-1D, PTP-2C, SH-PTP2, SHP-2, Shp2, SH-PTP3

**Protein Families:** Druggable Genome, Phosphatase

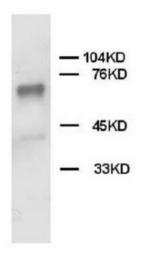
**Protein Pathways:** Adipocytokine signaling pathway, Chronic myeloid leukemia, Epithelial cell signaling in

Helicobacter pylori infection, Jak-STAT signaling pathway, Leukocyte transendothelial

migration, Natural killer cell mediated cytotoxicity, Neurotrophin signaling pathway, Renal cell

carcinoma

### **Product images:**



Western blot on Jurkat cell lysate using SHP-2 PTPN11 Antibody