

## Product datasheet for **CF501914**

### **SHP2 (PTPN11) Mouse Monoclonal Antibody [Clone ID: OTI1F7]**

#### **Product data:**

<b>Product Type:</b>	Primary Antibodies
<b>Clone Name:</b>	OTI1F7
<b>Applications:</b>	FC, WB
<b>Recommended Dilution:</b>	WB 1:1000, FLOW 1:100
<b>Reactivity:</b>	Human, Mouse, Rat
<b>Host:</b>	Mouse
<b>Isotype:</b>	IgG1
<b>Clonality:</b>	Monoclonal
<b>Immunogen:</b>	Full length human recombinant protein of human PTPN11(NP_002825) produced in HEK293T cell.
<b>Formulation:</b>	Lyophilized powder (original buffer 1X PBS, pH 7.3, 8% trehalose)
<b>Reconstitution Method:</b>	For reconstitution, we recommend adding 100uL distilled water to a final antibody concentration of about 1 mg/mL. To use this carrier-free antibody for conjugation experiment, we strongly recommend performing another round of desalting process. (OriGene recommends Zeba Spin Desalting Columns, 7KMWCO from Thermo Scientific)
<b>Purification:</b>	Purified from mouse ascites fluids or tissue culture supernatant by affinity chromatography (protein A/G)
<b>Conjugation:</b>	Unconjugated
<b>Storage:</b>	Store at -20°C as received.
<b>Stability:</b>	Stable for 12 months from date of receipt.
<b>Predicted Protein Size:</b>	67.8 kDa
<b>Gene Name:</b>	protein tyrosine phosphatase non-receptor type 11
<b>Database Link:</b>	<a href="#">NP_002825</a> <a href="#">Entrez Gene 19247 Mouse</a> <a href="#">Entrez Gene 25622 Rat</a> <a href="#">Entrez Gene 5781 Human</a> <a href="#">Q06124</a>



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**Background:**

The protein encoded by this gene is a member of the protein tyrosine phosphatase (PTP) family. PTPs are known to be signaling molecules that regulate a variety of cellular processes including cell growth, differentiation, mitotic cycle, and oncogenic transformation. This PTP contains two tandem Src homology-2 domains, which function as phospho-tyrosine binding domains and mediate the interaction of this PTP with its substrates. This PTP is widely expressed in most tissues and plays a regulatory role in various cell signaling events that are important for a diversity of cell functions, such as mitogenic activation, metabolic control, transcription regulation, and cell migration. Mutations in this gene are a cause of Noonan syndrome as well as acute myeloid leukemia. [provided by RefSeq]

**Synonyms:**

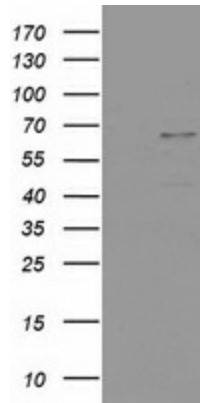
BPTP3; CFC; JMML; METCD5; NS1; PTP-1D; PTP2C; SH-PTP2; SH-PTP3; SHP2

**Protein Families:**

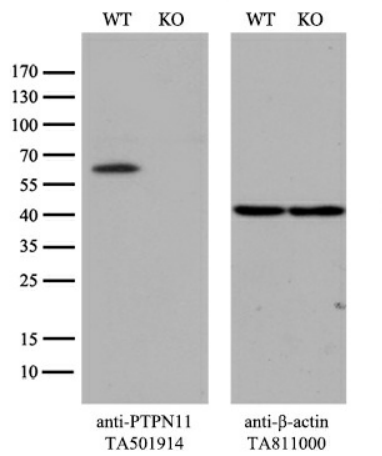
Druggable Genome, Phosphatase

**Protein Pathways:**

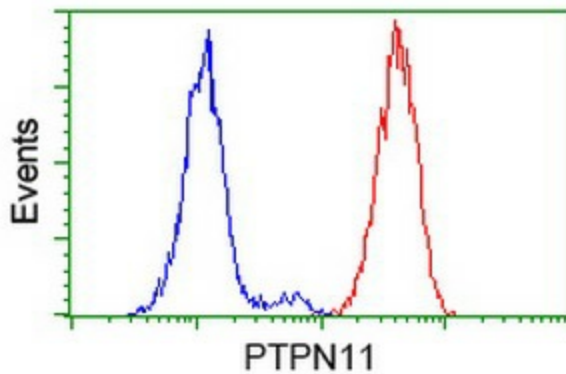
Adipocytokine signaling pathway, Chronic myeloid leukemia, Epithelial cell signaling in Helicobacter pylori infection, Jak-STAT signaling pathway, Leukocyte transendothelial migration, Natural killer cell mediated cytotoxicity, Neurotrophin signaling pathway, Renal cell carcinoma

**Product images:**

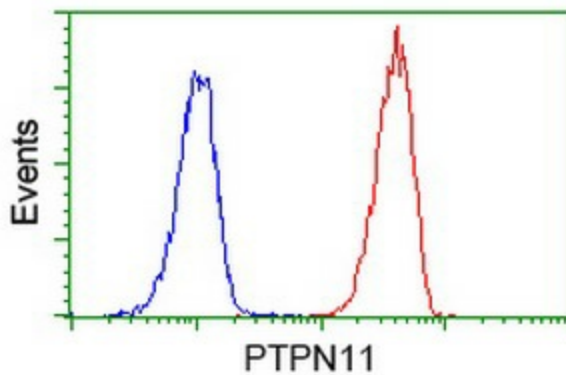
HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY PTPN11 (Cat# [RC220029], Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-PTPN11 (Cat# [TA501914]).



Equivalent amounts of cell lysates (10  $\mu$ g per lane) of wild-type 293T cells (WT, Cat# LC810293T) and PTPN11-Knockout 293T cells (KO, Cat# [LC811214]) were separated by SDS-PAGE and immunoblotted with anti-PTPN11 monoclonal antibody [TA501914], (1:500). Then the blotted membrane was stripped and reprobed with anti- $\beta$ -actin antibody ([TA811000]) as a loading control.



Flow cytometric Analysis of HeLa cells, using anti-PTPN11 antibody ([TA501914]), (Red), compared to a nonspecific negative control antibody (TA50011), (Blue).



Flow cytometric Analysis of Jurkat cells, using anti-PTPN11 antibody ([TA501914]), (Red), compared to a nonspecific negative control antibody (TA50011), (Blue).