

**Mouse Anti-SHP2/PTPN11 [B1]: MC0364, MC0364RTU7**

**Intended Use:** For Research Use Only

**Description:** The steady state of protein tyrosyl phosphorylation in cells is regulated by the opposing action of tyrosine kinases and protein tyrosine phosphatases (PTPs). Several groups have independently identified a non-transmembrane PTP, designated SH-PTP1 (also known as PTPN11, PTP1C, HCP and SHP), which is primarily expressed in hematopoietic cells and characterized by the presence of two SH2 domains N-terminal to the PTP domain. SH2 domains generally mediate the association of regulatory molecules with specific phosphotyrosine-containing sites on autophosphorylated receptors, thereby controlling the initial interaction of receptors with these substrates. A second and much more widely expressed PTP with SH2 domains, SH-PTP2 (also designated PTP1D and Syp), has been identified. Strong sequence similarity between SH-PTP2 and the *Drosophila* gene corkscrew (CSW) and their similar patterns of expression suggest that SH-PTP2 is the human corkscrew homolog.

**Specifications:**

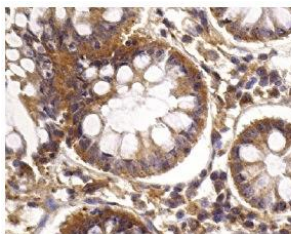
Clone: B1  
 Source: Mouse  
 Isotype: IgG1k  
 Reactivity: Human, mouse, rat, avian  
 Immunogen: Amino acids 580-597 of C-terminus of human SHPTP2  
 Localization: Cytoplasm  
 Formulation: Antibody in PBS pH7.4, containing BSA and ≤ 0.09% sodium azide (NaN<sub>3</sub>)  
 Storage: Store at 2°- 8°C  
 Applications: IHC, ELISA, Flow Cyt., IF, IP, WB  
 Package:

Description	Catalog No.	Size
SHP2/PTPN11 [B1] Concentrated	MC0364	1 ml
SHP2/PTPN11 [B1] Prediluted	MC0364RTU7	7 ml

**IHC Procedure\*:**

Positive Control Tissue: Breast carcinoma and endometrium tissue  
 Concentrated Dilution: 50-200  
 Pretreatment: Citrate pH6.0 or EDTA pH8.0, 15 minutes using Pressure Cooker, or 30-60 minutes using water bath at 95°-99°C  
 Incubation Time and Temp: 30-60 minutes @ RT  
 Detection: Refer to the detection system manual

\* Result should be confirmed by an established diagnostic procedure.



FFPE human colon stained with anti-SHP2 using DAB

**References:**

1. The tyrosine phosphatase SHP2 controls TGFβ-induced STAT3 signaling to regulate fibroblast activation and fibrosis.
2. Zehender A, et al. Nat Commun. Aug 14;9(1):3259, 2018.
3. Dephosphorylated parafibromin is a transcriptional coactivator of the Wnt/Hedgehog/Notch pathways. Kikuchi I, et al. Nat Commun. Sep 21;7:12887, 2016.
4. Oxidation sensitivity of the catalytic cysteine of the protein-tyrosine phosphatases SHP-1 and SHP-2. Weibrecht I, et al. Free Radic Biol Med. Jul 1;43(1):100-10, 2007.

Doc. 100-MC0364  
Rev. A