

## SP100-[PHD-BRD] (His) (SP100-C; Nuclear autoantigen Sp-100; Speckled 100 kDa)

**CATALOG NO.:** RD-11-262

**LOT NO.:**

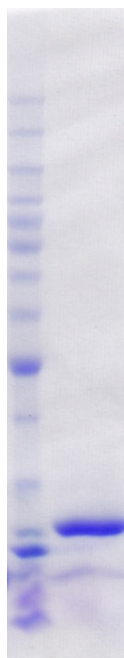
**DESCRIPTION:** Human recombinant SP100 PHD-bromodomain construct (residues 700-876; Genbank Accession # NM\_001080391; MW = 23.9 kDa) expressed with an N-terminal His-tag in *E. coli*. SP100, a component of promyelocytic (PML) nuclear bodies (PML-NBs, aka SP100-PML nuclear bodies, aka nuclear dots), is expressed as four major variants (SP100-A, -B, -C & -HMG) from a single gene<sup>1</sup>. Only one of these, SP100-C, comprises the C-terminal PHD-bromodomain region expressed in this construct<sup>1</sup>. Like the other major component(s) of PML-NBs, the PML proteins, SP100 is considered a tumor suppressor with functions in growth regulation, differentiation, transcription, apoptosis and responses to various stresses, including DNA damage and viral infection (see reviews<sup>2,3</sup>).

**PURITY:** >90% by SDS-PAGE

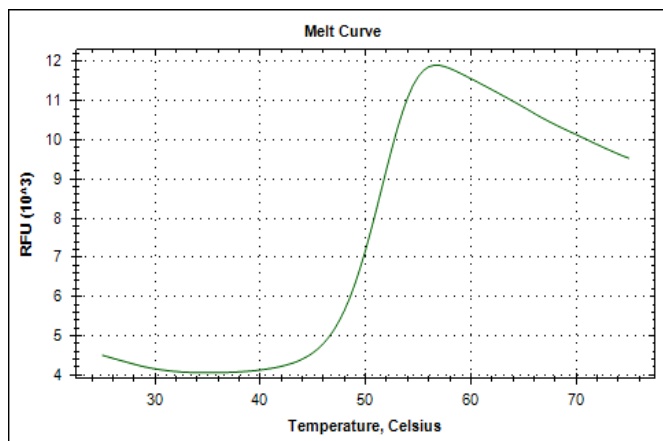
**SUPPLIED AS:**  $\mu\text{g}/\mu\text{L}$  in 50 mM Tris HCl, pH 7.5, 500 mM NaCl, 1 mM TCEP, 10 % glycerol (v/v) as determined by OD<sub>280</sub>.

**STORAGE:** -70°C. Thaw quickly and store on ice before use. The remaining, unused, undiluted protein should be snap frozen, for example in a dry/ice ethanol bath or liquid nitrogen. Minimize freeze/thaws if possible, but very low volume aliquots (<5  $\mu\text{l}$ ) or storage of diluted enzyme is not recommended.

**REFERENCES:** 1) J.-S. Seeler *et al. Mol. Cell. Biol.* 2001 **21** 3314; 2) V. Lallemand-Breitenbach & H. de Thé *Cold Spring Harb. Perspect. Biol.* 2010 **2** a000661; 3) R. Bernardi & P.P. Pandolfi *Front. Oncol.* 2014 **4** 23



**Coomassie blue-stained SDS-PAGE (4-12% acrylamide) of 4  $\mu\text{g}$  of RBC SP100-[PHD-BRD] (His).** MW markers (left) are, from top, 220, 160, 120, 100, 90, 80, 70, 60, 50, 40, 30, 25, 20, 15, 10 kDa.



**Differential Scanning Fluorimetry of RBC SP100-[PHD-BRD] (His)**  
Thermal denaturation of SP100-[PHD-BRD] (His) is detected (CFX384™ Touch thermal cycler, 'FRET' channel; Bio-Rad) by increased binding and fluorescence of the dye SYPRO® Orange (Life Technologies). Apo form of SP100-[PHD-BRD] (His) displays a T<sub>m</sub> of 51.5°C and is not stabilized in the presence of various known bromodomain ligands (JQ1, PFI1, CBP112, Bromosporine, SGC-CBP30, BET151 and RVX-208; not shown; all tested at 25  $\mu\text{M}$ ).

This product is not intended for therapeutic or diagnostic use in animals or in humans.

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