

## BRWD1-2 (His) (Bromodomain and WD repeat-containing protein 1, bromodomain-2; WDR9)

**CATALOG NO.:** RD-11-200

**LOT NO.:**

**DESCRIPTION:** Human recombinant BRWD1, bromodomain-2 (residues 1310-1430; Genbank Accession # NM\_018963; MW = 17.0 kDa) expressed in *E. coli* with an N-terminal His-tag. Full-length BRWD1 comprises two tandem bromodomains and eight WD repeats. The mouse homolog has been shown to associate with the SWI/SNF chromatin remodeling complex component, BRG1, and, through a polyglutamine-rich domain, to possibly function as a transcriptional activator<sup>1</sup>. Like the tandem-bromodomain containing BET-family member BRDT, mouse BRWD1 is required for spermiogenesis, but unlike BRDT, it is also required for female fertility<sup>2</sup>. The crystal structure of bromodomain-2 of human BRWD1 has been determined<sup>3</sup>.

**PURITY:** >95% by SDS-PAGE

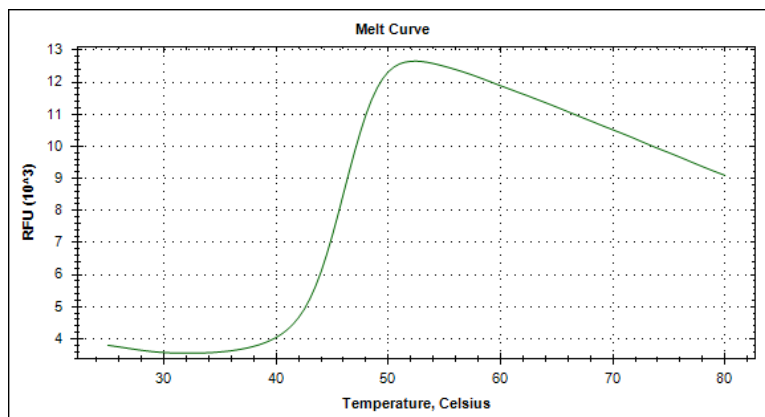
**SUPPLIED AS:**  $\_ \mu\text{g}/\mu\text{L}$  in 50 mM Tris HCl, pH 7.5, 500 mM NaCl, 1 mM TCEP, 10% glycerol (v/v) as determined by OD<sub>280</sub>.

**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 protein is not recommended.

**REFERENCES:** 1) H. Huang *et al. Dev. Dyn.* 2003 **227** 608; 2) D.L. Phillips *et al. Dev. Biol.* 2008 **317** 72; 3) P. Filippakopoulos *et al. Cell* 2012 **149** 214



**Coomassie blue-stained SDS-PAGE (4-12% acrylamide) of 4  $\mu\text{g}$  of RBC BRWD1-2 (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 BRWD1-2 (His).** Thermal denaturation of BRWD1-2 (His) is detected (CFX384TM Touch thermal cycler, 'FRET' channel; Bio- Rad) by increased binding and fluorescence of the dye SYPRO<sup>®</sup>Orange (Life Technologies). The apo form of BRWD1-2 (His) displays a T<sub>m</sub> of 46°C and is not stabilized in the presence of various known bromodomain ligands (JQ1, PF11, CBP112, Bromosporine, SGC-CBP30, BET151 and RVX-208; all tested at 25  $\mu\text{M}$  (not shown)).

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

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