PRODUCT DATASHEET

CECR2 (GST) (Cat eye syndrome critical region protein 2; KIAA1740)

CATALOG NO.: RD-11-194 **LOT NO.:**

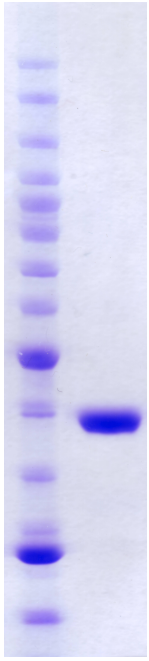
DESCRIPTION: Human recombinant CECR2 bromodomain (residues 425-538; Genbank Accession # NM_031413; MW = 40.6 kDa) expressed as an N-terminal GST-fusion protein in *E. coli*. CECR2, along with SMARCA1 (SNF2L) forms the ATP-dependent chromatin remodeling complex CERF and plays an essential role in neural tube formation[1]. The CECR2 bromodomain displays binding affinity for multiple histone H2A and H3 Lys(Ac) residues in singly acetylated histone peptide microarrays (H2A: K15Ac, K36Ac, K75Ac; H3: K9Ac, K14Ac, K18Ac & others), with the H3K9Ac and H3K14Ac interactions confirmed by isothermal titration calorimetry (ITC)[2]. A crystal structure for the CECR2 bromodomain has been determined[2].

PURITY: >90% by SDS-PAGE

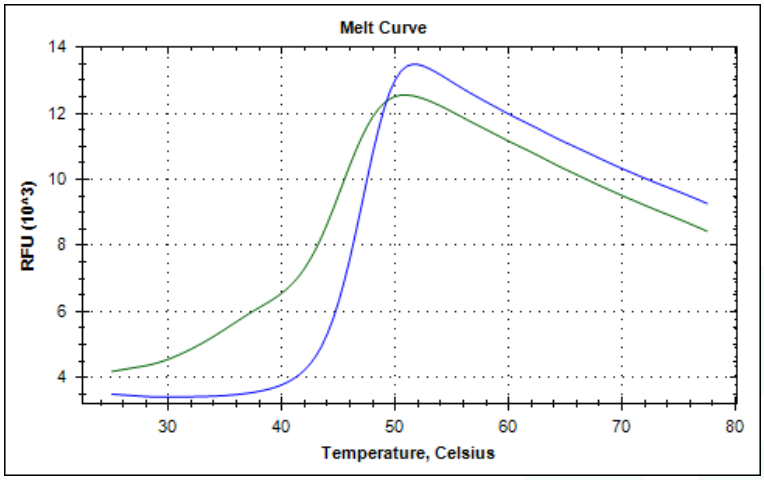
SUPPLIED AS: _ µg/µL in 50 mM Tris HCl, pH 7.5, 500 mM NaCl, 1 mM TCEP, 10 % glycerol as determined by OD_{280}.

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 µl) or storage of diluted enzyme is not recommended.

REFERENCES: 1) G.S. Banting *et al. Hum. Mol. Genet.* 2005 **14** 513; 2) P. Filippakopoulos *et al. Cell* 2012 **149** 214



Coomassie blue-stained SDS-PAGE (4-12% acrylamide) of 4 µg of RBC CECR2 (GST). 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 CECR2 (GST) in presence or absence of Bromosporine.
Thermal denaturation of CECR2 (GST) is detected (CFX384 TMTouch thermal cycler, 'FRET' channel; Bio- Rad) by increased binding and fluorescence of the dye SYPRO®Orange (Life Technologies).
Addition of 25 µM bromosporine (---) stabilizes the protein folding and shifts the Tm (inflection point) from 45°C to 47°C.

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