

UHRF1-[SRA] (GST)

CATALOG NO.: RD-11-299

LOT NO.:

DESCRIPTION: Human recombinant UHRF1 SRA domain (residues 414-617; Genbank Accession # NM_001048201; MW =49.7 kDa) expressed as an N-terminal GST fusion protein in *E. coli*. A tumor promoter overexpressed in a wide variety of cancers, the epigenetic regulator UHRF1 (Ubiquitin-like PHD and Ring Finger 1) is a multidomain protein that co-localizes with DNMT1 and functions in the maintenance of DNA methylation patterns (see review¹). Its SRA (SET and Ring-Associated) domain is an epigenetic reader that specifically binds 5-methylcytosine at hemimethylated CpG sites²⁻⁵.

PURITY: >95% by SDS-PAGE

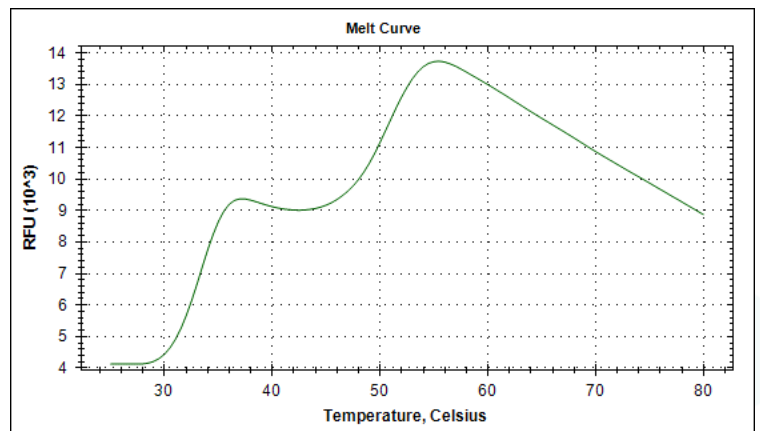
SUPPLIED AS: $\mu\text{g}/\mu\text{L}$ in 50 mM Tris HCl, pH 7.5, 500 mM NaCl, 1 mM TCEP, 10 % glycerol as determined by OD₂₈₀.

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) W. Ashraf *et al.* *Oncotarget* 2017 **8** 51946; 2) L.M. Johnson *et al.* *Curr. Biol.* 2007 **17** 322; 3) G.V Avvkumov *et al.* *Nature* 2008 **455** 822; 4) C. Qian *et al.* *J. Biol. Chem.* 2008 **283** 34490; 5) J. Song & G.P. Pfeifer *Bioessays* 2016 **38** 1038



Coomassie blue-stained SDS-PAGE (4-12% acrylamide) of 4 μg of RBC UHRF1-[SRA] (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 UHRF1-[SRA] (GST)

Thermal denaturation of UHRF1-[SRA] (GST) 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 UHRF1-[SRA] (GST) displays a T_m of 33°C (first inflection point; the second at ~50°C is due to the GST tag).

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