

PRODUCT DATASHEET

UHRF1-[SRA] (His)

CATALOG NO.: RD-11-235 LOT NO.:

DESCRIPTION: Human recombinant UHRF1 SRA domain (residues 414-617; Genbank Accession # NM_001048201; MW = 25.4 kDa) expressed as an N-terminal His-fusion protein in *E. coli*. A tumor promoter overexpressed in a wide variety of cancers, the epigenetic regulator UHRF1 (<u>Ubiquitin-like PHD</u> and <u>Ring Finger 1</u>) is a multidomain protein that co-localizes with DNMT1 and functions in the maintenance of DNA methylation patterns (see review¹). Its SRA (<u>SET and Ring-A</u>ssociated) domain is an epigenetic reader that specifically binds 5-methylcytosine at hemimethylated CpG sites²⁻⁵.

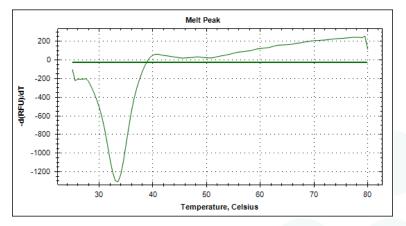
PURITY: >95% by SDS-PAGE

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) 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 bluestained SDS-PAGE (4-12% acrylamide) of 4 μg of RBC UHRF1-[SRA] (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 UHRF1-[SRA] (His) Thermal denaturation of UHRF1[SRA](His) is detected (CFX384[™] Touch thermal cycler, 'FRET' channel; Bio-Rad) by increased binding and fluorescence of the dye SYPRO[®] Orange (Life Technologies). In this negative differential plot of its melt curve UHRF1-[SRA](His) the downward pointing 'peak' indicates a Tm of 33.5°C.

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

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