BRPF1a (His) (Bromodomain and PHD finger-containing protein 1, Peregrin, BR140, (Isoform 1))

CATALOG NO.: RD-11-221

DESCRIPTION: Human recombinant BRPF1a bromodomain (residues 627-746; Genbank Accession # NM_001003694; MW = 16.9 kDa) expressed in E. coli with an N-terminal His-tag. Relative to BRPF1b (BRPF1 Isoform 2), the BRPF1a bromodomain contains a six amino acid insert, EVTELD, after residue 660. A scaffolding component of the MOZ/MORF histone acetyltransferase (HAT) complex\(^1\) and also an HBO1-BRPF1 HAT complex\(^2\), native BRPF1a contains, in addition to its acetyllysine-binding bromodomain, two other presumed histone/chromatin binding domains, a PWWP domain\(^3,4\) and a PHD zinc-finger. The BRPF1 bromodomain binds multiple acetyllysines in histone N-terminal tails, with preference for H2AK5Ac, H4K12Ac and H3K14Ac\(^5\). BRPF1 forms a complex with MOZ-TIF2 fusion proteins formed due to chromosomal translocations associated with acute myeloid leukemia (AML)\(^6\). Depletion of BRPF1 interferes with the MOZ-TIF2-driven transformation and upregulation of HOX gene expression, suggesting that BRPF1 could be a therapeutic target for AML\(^6\).

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 protein is not recommended.


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Coomassie blue-stained SDS-PAGE (4-12% acrylamide) of 4 μg of RBC BRPF1a (His). MW markers (left) are, from top, 220, 160, 120, 100, 90, 80, 70, 60, 50, 40, 30, 25, 20, 15 & 10 kDa.

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

Reaction Biology Corp., One Great Valley Parkway, Malvern PA 19355
Tel. 877-347-2368 Fax 610-722-0246 sales@reactionbiology.com
www.reactionbiology.com