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Polyclonal Antibody to BLM pThr99 - Aff - Purified AP55713PU-N

Bloom syndrome protein, DNA helicase, RECQ2, RECQL3, RecQ protein-like 3, RecQ-Alternate names:

like type 2

Quantity: 0.1 mg **Concentration:** 1.0 mg/ml

Background: Participates in DNA replication and repair. Exhibits a magnesium-dependent ATP-

> dependent DNA-helicase activity that unwinds single- and double-stranded DNA in a 3'-5' direction. Involved in 5'-end resection of DNA during double-strand break (DSB) repair: unwinds DNA and recruits DNA2 which mediates the cleavage of 5'-ssDNA.

Negatively regulates sister chromatid exchange (SCE).

Uniprot ID: P54132 **NCBI:** 9606 GeneID: 641 Host: Rabbit

Immunogen: Peptide sequence around phosphorylation site of threonine 99 (Q-E-T(p)-Q-R) derived

from Human Bloom Syndrome (KLH-conjugated)

Format: State: Liquid Ig fraction

Purification: Affinity chromatography using epitope-specific peptide

Buffer System: Rabbit IgG in phosphate buffered saline (without Mg2+ and Ca2+), pH

7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol

Western blot: 1:500~1:1000. **Applications:**

Immunohistochemistry on paraffin sections: 1:50~1:100.

Other applications not tested. Optimal dilutions are dependent on conditions and

should be determined by the user.

Molecular Weight:

Specificity: The antibody detects endogenous levels of Bloom Syndrome Protein only when

phosphorylated at threonine 99.

Species Reactivity: Tested: Human

Storage: Upon receipt, store undiluted (in aliquots) at -20°C.

> Avoid repeated freezing and thawing. Shelf life: one year from despatch.

General Readings: 1. Ellis NA, Groden J, Ye TZ, Straughen J, Lennon DJ, Ciocci S, et al. The Bloom's

syndrome gene product is homologous to RecQ helicases. Cell. 1995 Nov

17;83(4):655-66. PubMed PMID: 7585968.

2. Karow JK, Chakraverty RK, Hickson ID. The Bloom's syndrome gene product is a 3'-5' DNA helicase. J Biol Chem. 1997 Dec 5;272(49):30611-4. PubMed PMID: 9388193.

3. Pichierri P, Franchitto A, Rosselli F. BLM and the FANC proteins collaborate in a common pathway in response to stalled replication forks. EMBO J. 2004 Aug

4;23(15):3154-63. Epub 2004 Jul 15. PubMed PMID: 15257300.



Pictures:

Immunohistochemical analysis of paraffin-embedded human heart tissue, using Bloom Syndrome Protein (Phospho-Thr99) antibody AP55713PU-N (left)or the same antibody preincubated with blocking peptide (right).

Western blot analysis of extracts from HepG2 cells using Bloom Syndrome Protein (Phospho-Thr99) Antibody AP55713PU-N.The lane on the right is treated with the antigen-specific peptide.



