

Store at
4°C

Aiolos (D1C1E) Rabbit mAb (PE Conjugate)



#21799

Support: +1-978-867-2388 (U.S.)
www.cellsignal.com/supportOrders: 877-616-2355 (U.S.)
orders@cellsignal.comEntrez-Gene ID #22806
UniProt ID #Q9UKT9

New 07/15

For Research Use Only. Not For Use In Diagnostic Procedures.**Applications**
F
Endogenous**Species Cross-Reactivity***
H, M**Isotype**
Rabbit IgG

Description: This Cell Signaling Technology antibody is conjugated to phycoerythrin (PE) and tested in-house for direct flow cytometry analysis in human cells. This antibody is expected to exhibit the same species cross-reactivity as the unconjugated Aiolos (D1C1E) Rabbit mAb #15103.

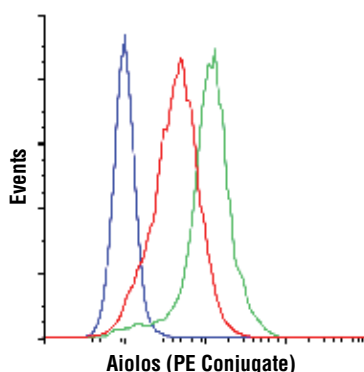
Background: Aiolos is an Ikaros family transcription factor composed of several zinc fingers that mediate DNA binding and homodimerization or heterodimerization with other Ikaros family members (1). Multiple Aiolos isoforms are generated through alternative splicing of the portion of the transcript encoding the amino-terminal zinc fingers (2). Aiolos is expressed by lymphoid tissues, with highest expression levels seen in mature B and T cells (1). Ikaros family proteins control lymphocyte development by recruiting chromatin remodeling complexes to DNA (3). B cells from mice lacking Aiolos have a reduced threshold for activation, increased proliferation, and elevated levels of IgG and IgE. In addition, Aiolos null mice develop B cell lymphomas (4). In T cells, Aiolos contributes to Th17 cell differentiation by suppressing IL-2 expression (5). Aberrant expression of Aiolos in transformed epithelial cells promotes anchorage independence through downregulation of adhesion-related genes (6). Alterations in the Aiolos gene are observed in near haploid acute lymphoblastic leukemia, and the genetic locus containing Aiolos is linked to increased susceptibility to rheumatoid arthritis and systemic lupus erythematosus (7-9).

Specificity/Sensitivity: Aiolos (D1C1E) Rabbit mAb (PE Conjugate) recognizes endogenous levels of total Aiolos protein.

Source/Purification: Monoclonal antibody is produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Pro46 of human Aiolos protein.

Background References:

- (1) Morgan, B. et al. (1997) EMBO J 16, 2004-13.
- (2) Liippo, J. et al. (2001) Eur J Immunol 31, 3469-74.
- (3) Kim, J. et al. (1999) Immunity 10, 345-55.
- (4) Wang, J.H. et al. (1998) Immunity 9, 543-53.
- (5) Quintana, F.J. et al. (2012) Nat Immunol 13, 770-7.
- (6) Li, X. et al. (2014) Cancer Cell 25, 575-89.
- (7) Holmfeldt, L. et al. (2013) Nat Genet 45, 242-52.
- (8) Kurreeman, F.A. et al. (2012) Am J Hum Genet 90, 524-32.
- (9) Lessard, C.J. et al. (2012) Am J Hum Genet 90, 648-60.



Flow cytometric analysis of U-937 cells (blue), untreated RPMI 8226 cells (green), or lenalidomide-treated RPMI 8226 cells (2 μ M, 24 hr; red), using Aiolos (D1C1E) Rabbit mAb (PE Conjugate).

Storage: Supplied in PBS (pH 7.2), less than 0.1% sodium azide and 2 mg/ml BSA. Store at 4°C. Do not aliquot the antibody. Protect from light. Do not freeze.

***Species cross-reactivity is determined by western blot using the unconjugated antibody.**

Recommended Antibody Dilutions:

Flow Cytometry 1:50

For product specific protocols and a complete listing of recommended companion products please see the product web page at www.cellsignal.com

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Applications: W—Western IP—Immunoprecipitation IHC—Immunohistochemistry ChIP—Chromatin Immunoprecipitation IF—Immunofluorescence F—Flow cytometry E-P—ELISA-Peptide **Species Cross-Reactivity:** H—human M—mouse R—rat Hm—hamster Mk—monkey Mi—mink C—chicken Dm—D. melanogaster X—Xenopus Z—zebrafish B—bovine Dg—dog Pg—pig Sc—S. cerevisiae Ce—C. elegans Hr—Horse All—all species expected Species enclosed in parentheses are predicted to react based on 100% homology.