

Store at
-20°C

DAF/CD55 Antibody

#67686

Support: +1-978-867-2388 (U.S.)
www.cellsignal.com/supportOrders: 877-616-2355 (U.S.)
orders@cellsignal.comEntrez-Gene ID #1604
UniProt ID #P08174

New 10/17

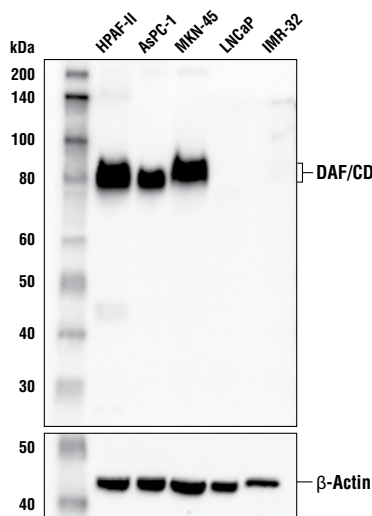
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Applications W Endogenous	Species Cross-Reactivity* H	Molecular Wt. 78 kDa	Source Rabbit**
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Background: Decay-accelerating factor (DAF/CD55) is a GPI-linked plasma membrane glycoprotein normally expressed on the surface of vascular endothelial and hematopoietic cells, which are continuously exposed to autologous complement components. In conjunction with other membrane complement regulatory proteins (CD35, CD46, and CD59), DAF/CD55 protects healthy cells from inappropriate complement-mediated lysis (1). DAF/CD55 inhibits activation of the complement cascade by promoting membrane dissociation and inactivation of C3 convertase, which inhibits amplification of the classical and alternative complement cascades (2). Research studies have demonstrated that DAF/CD55 is overexpressed in a variety of solid and liquid tumors, which functions to protect tumor cells from complement-mediated attack (3,4). Given its ability to disable the complement cascade and facilitate immune evasion by tumor cells, DAF/CD55 has received attention as a potential therapeutic target for the treatment of human malignancies. CD55 deficiency is also linked to human disease. The inability to express CD55 on the surface of erythrocytes renders them highly susceptible to complement-mediated lysis, which contributes to the development of paroxysmal nocturnal hemoglobinuria (PNH). PNH is characterized by hemolytic anaemia, pancytopenia, and venous thrombosis (5).

Specificity/Sensitivity: DAF/CD55 Antibody recognizes endogenous levels of total CD55/DAF protein.

Source/Purification: Polyclonal antibodies are produced by immunizing animals with a synthetic peptide corresponding to residues near the amino terminus of human DAF/CD55 protein. Antibodies are purified by protein A and peptide affinity chromatography.



Western blot analysis of extracts from various cell lines using DAF/CD55 Antibody (upper) and β -Actin (D6A8) Rabbit mAb #8457 (lower). As expected, DAF/CD55 expression is not detected in either LNCaP or IMR-32 cells.

Storage: Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 μ g/ml BSA and 50% glycerol. Store at -20°C . Do not aliquot the antibody.

*Species cross-reactivity is determined by western blot.

**Anti-rabbit secondary antibodies must be used to detect this antibody.

Recommended Antibody Dilutions:

Western blotting 1:1000

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

Background References:

- (1) Fishelson, Z. et al. (2003) *Mol Immunol* 40, 109-23.
- (2) Brodbeck, W.G. et al. (1996) *J Immunol* 156, 2528-33.
- (3) Inoue, T. et al. (2002) *Mol Pathol* 55, 193-9.
- (4) Niehans, G.A. et al. (1996) *Am J Pathol* 149, 129-42.
- (5) Brodsky, R.A. (2014) *Blood* 124, 2804-11.

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IMPORTANT: For western blots, incubate membrane with diluted antibody in 5% w/v nonfat dry milk, 1X TBS, 0.1% Tween[®]20 at 4°C with gentle shaking, overnight.

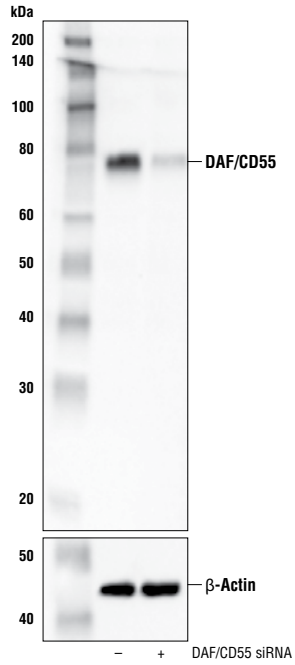
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Applications: W—Western IP—Immunoprecipitation IHC—Immunohistochemistry ChIP—Chromatin Immunoprecipitation IF—Immunofluorescence F—Flow cytometry E-P—ELISA-Peptide Species Cross-Reactivity: H—human M—mouse R—rat Hm—hamster Mk—monkey Mi—mink C—chicken 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.



Western blot analysis of extracts from HeLa cells, mock transfected (-) or transfected with siRNA targeting human DAF/CD55 (+), using DAF/CD55 Antibody (upper) and β -Actin (D6A8) Rabbit mAb #8457 (lower).

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