

DPF2 (N-13): sc-131510

BACKGROUND

DPF2 (D4, zinc and double PHD fingers family 2), also known as REQ (requiem), UBID4 or ubi-d4, is a 391 amino acid protein that is a member of the D4 domain family. DPF2, a ubiquitously expressed protein, localizes to the nucleus and contains one C₂H₂- and 2 PHD-type zinc finger motifs. DPF2 may function as a transcription factor that is necessary for apoptosis and may also play a role in the development and maturation of lymphoid cells. It is thought that, during apoptosis, DPF2 activity is inhibited by LRF (Leukemia/lymphoma-related factor), which is up-regulated by Integrin. This suggests that DPF2 may be a potential target for future cancer therapies that induce apoptosis in leukemia cells.

REFERENCES

- Gabig, T.G., Mantel, P.L., Rosli, R. and Crean, C.D. 1994. Requiem: a novel zinc finger gene essential for apoptosis in myeloid cells. *J. Biol. Chem.* 269: 29515-29519.
- Gabig, T.G., Crean, C.D., Klenk, A., Long, H., Copeland, N.G., Gilbert, D.J., Jenkins, N.A., Quincey, D., Parente, F., Lespinasse, F., Carle, G.F., Gaudray, P., Zhang, C.X., Calender, A., Hoepfner, J., Kas, K., Thakker, R.V., Farnebo, F., Teh, B.T., et al. 1998. Expression and chromosomal localization of the Requiem gene. *Mamm. Genome* 9: 660-665.
- Nabirochkina, E., Simonova, O.B., Mertsalov, I.B., Kulikova, D.A., Ladigina, N.G., Korochkin, L.I. and Buchman, V.L. 2002. Expression pattern of dd4, a sole member of the d4 family of transcription factors in *Drosophila melanogaster*. *Mech. Dev.* 114: 119-123.
- Astier, A.L., Xu, R., Svoboda, M., Hinds, E., Munoz, O., de Beaumont, R., Crean, C.D., Gabig, T. and Freedman, A.S. 2003. Temporal gene expression profile of human precursor B leukemia cells induced by adhesion receptor: identification of pathways regulating B cell survival. *Blood* 101: 1118-1127.
- Wong, D.C., Wong, K.T., Nissom, P.M., Heng, C.K. and Yap, M.G. 2006. Targeting early apoptotic genes in batch and fed-batch CHO cell cultures. *Biotechnol. Bioeng.* 95: 350-361.

CHROMOSOMAL LOCATION

Genetic locus: DPF2 (human) mapping to 11q13.1; Dpf2 (mouse) mapping to 19 A.

SOURCE

DPF2 (N-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of DPF2 of human origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-131510 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

RESEARCH USE

For research use only, not for use in diagnostic procedures.

APPLICATIONS

DPF2 (N-13) is recommended for detection of DPF2 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000); non cross-reactive with family members DPF1 or DPF3.

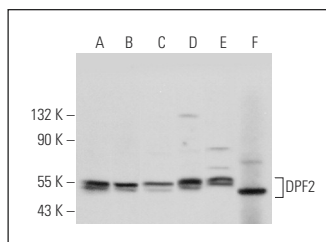
DPF2 (N-13) is also recommended for detection of DPF2 in additional species, including equine, canine and porcine.

Suitable for use as control antibody for DPF2 siRNA (h): sc-97031, DPF2 siRNA (m): sc-143156, DPF2 shRNA Plasmid (h): sc-97031-SH, DPF2 shRNA Plasmid (m): sc-143156-SH, DPF2 shRNA (h) Lentiviral Particles: sc-97031-V and DPF2 shRNA (m) Lentiviral Particles: sc-143156-V.

Molecular Weight of DPF2: 44 kDa.

Positive Controls: RT-4 whole cell lysate: sc-364257, Y79 cell lysate: sc-2240 or U-251-MG whole cell lysates: sc-364176.

DATA



DPF2 (N-13): sc-131510. Western blot analysis of DPF2 expression in U-251-MG (A), THP-1 (B), NCI-H226 (C), Y79 (D) and RT-4 (E) whole cell lysates and mouse kidney tissue extract (F).

STORAGE

Store at 4° C, ****DO NOT FREEZE****. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.



Try **DPF2 (C-9): sc-514297** or **DPF2 (WW-2): sc-101106**, our highly recommended monoclonal alternatives to DPF2 (N-13).