

# DELE1 (D-11): sc-515080

## BACKGROUND

With 181 million base pairs encoding around 1,000 genes, chromosome 5 is about 6% of human genomic DNA. It is associated with Cockayne syndrome through the ERCC8 gene and familial adenomatous polyposis through the adenomatous polyposis coli (APC) tumor suppressor gene. Treacher Collins syndrome is also chromosome 5 associated and is caused by insertions or deletions within the TCOF1 gene. Deletion of the p arm of chromosome 5 leads to Cri du chat syndrome. Deletion of 5q or chromosome 5 altogether is common in therapy-related acute myelogenous leukemias and myelodysplastic syndrome.

## REFERENCES

1. Dixon, M.J., et al. 1991. The gene for Treacher Collins syndrome maps to the long arm of chromosome 5. *Am. J. Hum. Genet.* 49: 17-22.
2. Saltman, D.L., et al. 1993. A physical map of 15 loci on human chromosome 5q23-q33 by two-color fluorescence *in situ* hybridization. *Genomics* 16: 726-732.
3. Nagase, T., et al. 1995. Prediction of the coding sequences of unidentified human genes. IV. The coding sequences of 40 new genes (KIAA0121-KIAA0160) deduced by analysis of cDNA clones from human cell line KG-1. *DNA Res.* 2: 167-174, 199-210.
4. Kadmon, M., et al. 2001. Duodenal adenomatosis in familial adenomatous polyposis coli. A review of the literature and results from the Heidelberg Polyposis Register. *Int. J. Colorectal Dis.* 16: 63-75.
5. South, S.T., et al. 2006. A new genomic mechanism leading to Cri-du-chat syndrome. *Am. J. Med. Genet. A* 140: 2714-2720.

## CHROMOSOMAL LOCATION

Genetic locus: DELE1 (human) mapping to 5q31.3; Dele1 (mouse) mapping to 18 B3.

## SOURCE

DELE1 (D-11) is a mouse monoclonal antibody raised against amino acids 338-400 mapping within an internal region of DELE1 of human origin.

## PRODUCT

Each vial contains 200 µg IgG<sub>1</sub> kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

DELE1 (D-11) is available conjugated to agarose (sc-515080 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-515080 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-515080 PE), fluorescein (sc-515080 FITC), Alexa Fluor® 488 (sc-515080 AF488), Alexa Fluor® 546 (sc-515080 AF546), Alexa Fluor® 594 (sc-515080 AF594) or Alexa Fluor® 647 (sc-515080 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-515080 AF680) or Alexa Fluor® 790 (sc-515080 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

## RESEARCH USE

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

## APPLICATIONS

DELE1 (D-11) is recommended for detection of DELE1 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, 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).

Suitable for use as control antibody for DELE1 siRNA (h): sc-91731, DELE1 siRNA (m): sc-108107, DELE1 shRNA Plasmid (h): sc-91731-SH, DELE1 shRNA Plasmid (m): sc-108107-SH, DELE1 shRNA (h) Lentiviral Particles: sc-91731-V and DELE1 shRNA (m) Lentiviral Particles: sc-108107-V.

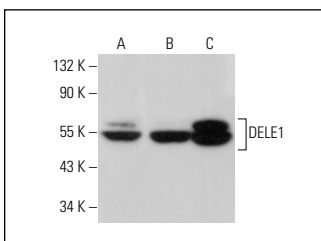
Molecular Weight of DELE1: 56 kDa.

Positive Controls: NTERA-2 cl.D1 whole cell lysate: sc-364181, c4 whole cell lysate: sc-364186 or Hep G2 cell lysate: sc-2227.

## RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

## DATA



DELE1 (D-11): sc-515080. Western blot analysis of DELE1 expression in Hep G2 (A), NTERA-2 cl.D1 (B) and c4 (C) whole cell lysates.

## SELECT PRODUCT CITATIONS

1. Guo, X., et al. 2020. Mitochondrial stress is relayed to the cytosol by an OMA1-DELE1-HR1 pathway. *Nature* 579: 427-432.
2. Sui, L., et al. 2023. Death associated protein-3 (DAP3) and DAP3 binding cell death enhancer-1 (DELE1) in human colorectal cancer, and their impacts on clinical outcome and chemoresistance. *Int. J. Oncol.* 62: 7.

## STORAGE

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

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