SANTA CRUZ BIOTECHNOLOGY, INC.

DPY-30 (D-14): sc-167677

BACKGROUND

DPY-30, also known as Saf19 or HDPY-30, is a 99 amino acid nuclear protein that is a component of MLL-containing complexes, including the ASCOM, MLL, MLL2/MLL3 and MLL3/MLL4 complexes. The gene that encodes DPY-30 maps to human chromosome 2, which is the second largest human chromosome, consisting of 237 million bases encoding over 1,400 genes. A number of genetic diseases are linked to genes on chromosome 2. Harlequin icthyosis, a rare and morbid skin deformity, is associated with mutations in the ABCA12 gene. The lipid metabolic disorder sitosterolemia is associated with ABCG5 and ABCG8. An extremely rare recessive genetic disorder, Alström syndrome is due to mutations in the ALMS1 gene.

REFERENCES

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4. Thomas, A.C., et al. 2006. ABCA12 is the major harlequin ichthyosis gene. J. Invest. Dermatol. 126: 2408-2413.
5. Akiyama, et al. 2007. Compound heterozygous ABCA12 mutations including a novel nonsense mutation underlie harlequin ichthyosis. Dermatology 215: 155-159.
6. Cho, Y.W., et al. 2007. PTIP associates with MLL3- and MLL4-containing Histone H3 Lysine 4 methyltransferase complex. J. Biol. Chem. 282: 20395-20406.
7. Marshall, J.D., et al. 2007. Alström syndrome. Eur. J. Hum. Genet. 15: 1193-1202.
8. Marshall, J.D., et al. 2007. Spectrum of ALMS1 variants and evaluation of genotype-phenotype correlations in Alström syndrome. Hum. Mutat. 28: 1114-1123.

CHROMOSOMAL LOCATION

Genetic locus: DPY30 (human) mapping to 2p22.3; Dpy30 (mouse) mapping to 17 E2.

SOURCE

DPY-30 (D-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of DPY-30 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-167677 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

DPY-30 (D-14) is recommended for detection of DPY-30 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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).

DPY-30 (D-14) is also recommended for detection of DPY-30 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for DPY-30 siRNA (h): sc-94833, DPY-30 siRNA (m): sc-143166, DPY-30 shRNA Plasmid (h): sc-94833-SH, DPY-30 shRNA Plasmid (m): sc-143166-SH, DPY-30 shRNA (h) Lentiviral Particles: sc-94833-V and DPY-30 shRNA (m) Lentiviral Particles: sc-143166-V.

Molecular Weight of DPY-30: 11 kDa.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

STORAGE

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

RESEARCH USE

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

PROTOCOLS

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