

# NBL4 (G-17): sc-243586

## BACKGROUND

NBL4, also known as band 4.1-like protein 4A, EPB41L4A (erythrocyte membrane protein band 4.1 like 4A) or EPB41L4, is a 686 amino acid cytoskeletal protein that contains one FERM domain. While widely expressed, NBL4 is expressed at highest levels in thymus, brain, liver and peripheral blood leukocytes, with low levels found in colon, heart, testis and kidney. The gene encoding NBL4 maps to human chromosome 5, which contains 181 million base pairs and comprises nearly 6% of the human genome. Chromosome 5 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, while deletion of the q arm of chromosome 5 altogether is common in therapy-related acute myelogenous leukemias and myelodysplastic syndrome.

## REFERENCES

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3. Crawford, M.J., et al. 1997. Human and murine PTX1/Ptx1 gene maps to the region for Treacher Collins syndrome. *Mamm. Genome* 8: 841-845.
4. Shimizu, K., et al. 2000. Molecular cloning of a novel NF2/ERM/4.1 superfamily gene, ehm2, that is expressed in high-metastatic K1735 murine melanoma cells. *Genomics* 65: 113-120.
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6. Finch, R., et al. 2005. Familial adenomatous polyposis and mental retardation caused by a *de novo* chromosomal deletion at 5q15-q22: report of a case. *Dis. Colon Rectum* 48: 2148-2152.
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## CHROMOSOMAL LOCATION

Genetic locus: EPB41L4A (human) mapping to 5q22.1; Epb4.114a (mouse) mapping to 18 B1.

## SOURCE

NBL4 (G-17) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of NBL4 of human origin.

## PRODUCT

Each vial contains 200  $\mu$ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-243586 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

NBL4 (G-17) is recommended for detection of NBL4 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).

NBL4 (G-17) is also recommended for detection of NBL4 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for NBL4 siRNA (h): sc-92034, NBL4 siRNA (m): sc-149848, NBL4 shRNA Plasmid (h): sc-92034-SH, NBL4 shRNA Plasmid (m): sc-149848-SH, NBL4 shRNA (h) Lentiviral Particles: sc-92034-V and NBL4 shRNA (m) Lentiviral Particles: sc-149848-V.

Molecular Weight of NBL4: 79 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<sup>™</sup> compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker<sup>™</sup> 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<sup>™</sup> 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](http://www.scbt.com) or our catalog for detailed protocols and support products.