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a WellMed Company

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Version: 2.0
IFU: NUT ILM3626

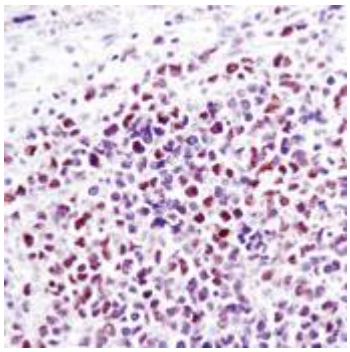
NUT
clone C52B1

Instructions for Use

Specification:
Nuclear protein in testis (NUT) is normally confined to the germ cells of the testis and ovary (1,2). NUT midline carcinoma (NMC) is a recently recognized cancer that is defined by the presence of chromosomal rearrangements involving the NUT gene on chromosome 15q14 (3). In most cases the chromosomal translocation occurs between NUT and BRD4 on chromosome 19, resulting in the formation of a BRD4-NUT fusion protein. In the remaining tumours, variant NUT rearrangements are present involving BRD3, a very close homolog of BRD4. BRD4-NUT and BRD3-NUT encode fusion proteins that appear to contribute to carcinogenesis by blocking epithelial cell differentiation. NMCs, which are aggressive and highly lethal carcinomas, are morphologically indistinguishable from other poorly differentiated carcinomas. Given the limited expression of endogenous NUT protein, this antibody can be used to detect NUT fusion proteins in tissues by immunohistochemistry and immunofluorescence (2). NUT (C52B1) Rabbit mAb detects endogenous levels of total NUT protein. The antibody also detects endogenous levels of the BRD4-NUT fusion protein found in NUT midline carcinoma (NMC).

Availability:

Catalog No.	Contents	Volume
ILM3626-C01	NUT	0,1 ml concentrate



Intended use: For Research Use Only

Reactivity: Human, Rat

Clone: C52B1

Species of origin: Rabbit

Isotype: IgG

Control Tissue: Normal human testis

Staining: Cytoplasmic

Immunogen: Recombinant protein corresponding to the human NUT protein

Presentation: Supplied in 10 mM HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA, 50% glycerol and less than 0.02% sodium azide

Application and suggested dilutions:
Pretreatment: Heat induced epitope retrieval in 10 mM citrate buffer, pH6.0, or in 50 mM Tris buffer pH9.5, for 20 minutes is required for IHC staining on formalin-fixed, paraffin embedded tissue sections.

- Immunohistochemical staining of formalin-fixed, paraffin embedded tissue section (dilution up to 1:50)
- Western blotting (dilution up to 1:1000)
- Immunoprecipitation (dilution up to 1:100)

The optimal dilution for a specific application should be determined by the investigator.

Note: Dilution of the antibody in 10% normal goat serum followed by a goat anti-rabbit secondary antibody-based detection is recommended.

Storage & Stability: Store at -20 °C, do not aliquot. Do not use after expiration date printed on the vial.

References:

1)French, C.A. et al. (2003) *Cancer Res* 63, 304–7.
2) Haack, H. et al. (2009) *Am J Surg Pathol*, Epub ahead of print.
3) French, C.A. et al. (2008) *Oncogene* 27, 2237–42.