

NUDT21 (C-15): sc-107824

BACKGROUND

NUDT21 (nudix (nucleoside diphosphate linked moiety X)-type motif 21), also known as CPSF5 (cleavage and polyadenylation specificity factor subunit 5) or CFIm25 (cleavage and polyadenylation specificity factor 25 kDa subunit), is a member of the nudix hydrolase family of pyrophosphatases. Nudix hydrolases contain a characteristic NUDIX domain and are responsible for catalyzing the hydrolysis of nucleoside diphosphate derivatives. NUDT21 localizes to the paraspeckles and forms a heterodimer with CPSF6 or CPSF7 to comprise the CFIm (mammalian cleavage factor I) complex. NUDT21 is the smaller subunit of the complex and is present in all heterodimer combinations. CFIm plays an important role in pre-mRNA 3' cleavage and polyadenylation processing.

REFERENCES

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4. Jung, J., et al. 2007. Overexpression, crystallization and preliminary X-ray crystallographic analysis of nudix hydrolase Orf141 from *Escherichia coli* K-1. *Acta Crystallogr. Sect. F Struct. Biol. Cryst. Commun.* 63: 812-815.
5. Shimazu, T., et al. 2007. Multiple histone deacetylases and the CREB-binding protein regulate pre-mRNA 3'-end processing. *J. Biol. Chem.* 282: 4470-4478.
6. Gabelli, S.B., et al. 2007. Structure and function of the *E. coli* dihydro-neopterin triphosphate pyrophosphatase: a nudix enzyme involved in folate biosynthesis. *Structure* 15: 1014-1022.
7. Sartini, B.L., et al. 2008. Pre-messenger RNA cleavage factor I (CFIm): Potential role in alternative polyadenylation during spermatogenesis. *Biol. Reprod.* 78: 472-482.

CHROMOSOMAL LOCATION

Genetic locus: NUDT21 (human) mapping to 16q12.2; Nudt21 (mouse) mapping to 8 C5.

SOURCE

NUDT21 (C-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of NUDT21 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-107824 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

NUDT21 (C-15) is recommended for detection of NUDT21 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).

NUDT21 (C-15) is also recommended for detection of NUDT21 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for NUDT21 siRNA (h): sc-93336, NUDT21 siRNA (m): sc-77406, NUDT21 shRNA Plasmid (h): sc-93336-SH, NUDT21 shRNA Plasmid (m): sc-77406-SH, NUDT21 shRNA (h) Lentiviral Particles: sc-93336-V and NUDT21 shRNA (m) Lentiviral Particles: sc-77406-V.

Molecular Weight of NUDT21: 25 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200.

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.



Try **NUDT21 (2203C3): sc-81109**, our highly recommended monoclonal alternative to NUDT21 (C-15).