

# **Product datasheet for CF502219**

## OriGene Technologies, Inc.

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### NMNAT1 Mouse Monoclonal Antibody [Clone ID: OTI1F7]

#### **Product data:**

**Product Type:** Primary Antibodies

Clone Name: OTI1F7
Applications: IF, WB

Recommended Dilution: WB 1:2000, IF 1:100

Reactivity: Human
Host: Mouse
Isotype: IgG1

Clonality: Monoclonal

Immunogen: Full length human recombinant protein of human NMNAT1 (NP\_073624) produced in

HEK293T cell.

**Formulation:** Lyophilized powder (original buffer 1X PBS, pH 7.3, 8% trehalose)

**Reconstitution Method:** For reconstitution, we recommend adding 100uL distilled water to a final antibody

concentration of about 1 mg/mL. To use this carrier-free antibody for conjugation experiment, we strongly recommend performing another round of desalting process. (OriGene recommends Zeba Spin Desalting Columns, 7KMWCO from Thermo Scientific)

**Purification:** Purified from mouse ascites fluids or tissue culture supernatant by affinity chromatography

(protein A/G)

Conjugation: Unconjugated

**Storage:** Store at -20°C as received.

**Stability:** Stable for 12 months from date of receipt.

Predicted Protein Size: 31.8 kDa

**Gene Name:** nicotinamide nucleotide adenylyltransferase 1

Database Link: NP 073624

Entrez Gene 64802 Human

Q9HAN9





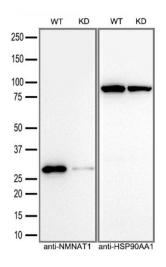
Background:

The coenzyme NAD and its derivatives are involved in hundreds of metabolic redox reactions and are utilized in protein ADP-ribosylation, histone deacetylation, and in some Ca(2+) signaling pathways. NMNAT (EC 2.7.7.1) is a central enzyme in NAD biosynthesis, catalyzing the condensation of nicotinamide mononucleotide (NMN) or nicotinic acid mononucleotide (NaMN) with the AMP moiety of ATP to form NAD or NaAD (Zhang et al., 2003 [PubMed 12574164]). [supplied by OMIM]

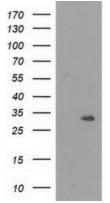
Synonyms: LCA9; NMNAT; PNAT1; SHILCA

**Protein Pathways:** Metabolic pathways, Nicotinate and nicotinamide metabolism

#### **Product images:**

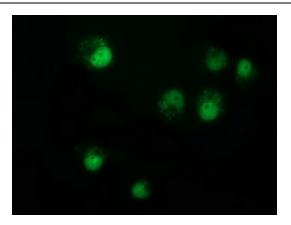


Equivalent amounts of cell lysates (30 ug per lane) of wild-type HeLa cells (WT) and NMNAT1-Knockdown HeLa cells (KD) were separated by SDS-PAGE and immunoblotted with anti-NMNAT1 monoclonal antibody [TA502219] (1:2500). Then the blotted membrane was stripped and reprobed with anti-HSP90AA1 antibody as a loading control.



HEK293T cells were transfected with the pCMV6-ENTRY control (Left lane) or pCMV6-ENTRY NMNAT1 ([RC204825], Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-NMNAT1 ([TA502219]). Positive lysates [LY402948] (100ug) and [LC402948] (20ug) can be purchased separately from OriGene.





Anti-NMNAT1 mouse monoclonal antibody ([TA502219]) immunofluorescent staining of COS7 cells transiently transfected by pCMV6-ENTRY NMNAT1 ([RC204825]).