

# **Product datasheet for TA501097**

## OriGene Technologies, Inc.

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## NIT2 Mouse Monoclonal Antibody [Clone ID: OTI3D5]

#### **Product data:**

**Product Type:** Primary Antibodies

Clone Name: OTI3D5

**Applications:** FC, IF, IHC, WB

**Recommended Dilution:** WB 1:2000, IHC 1:50, IF 1:100, Flow 1:100

Reactivity: Human, Mouse, Rat

Host: Mouse Isotype: IgG2b

Clonality: Monoclonal

Immunogen: Full length human recombinant protein of human NIT2 (NP\_064587) produced in HEK293T

cell

**Formulation:** PBS (pH 7.3) containing 1% BSA, 50% glycerol and 0.02% sodium azide.

**Concentration:** 0.79 mg/ml

**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:** 30.4 kDa

**Gene Name:** nitrilase family member 2

Database Link: NP 064587

Entrez Gene 52633 MouseEntrez Gene 288174 RatEntrez Gene 56954 Human

O9NOR4

**Background:** Has a omega-amidase activity. The role of omega-amidase is to remove potentially toxic

intermediates by converting alpha-ketoglutaramate and alpha-ketosuccinamate to biologically useful alpha-ketoglutarate and oxaloacetate, respectively. Overexpression decreases the colony-forming capacity of cultured cells by arresting cells in the G2 phase of

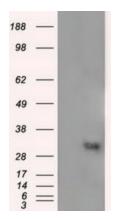
the cell cycle



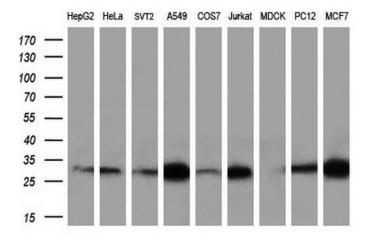


Synonyms: HEL-S-8a

## **Product images:**

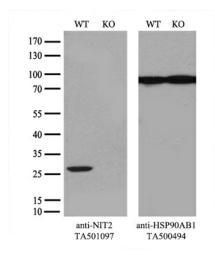


HEK293T cells were transfected with the pCMV6-ENTRY control (Left lane) or pCMV6-ENTRY NIT2 ([RC210660], Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-NIT2. Positive lysates [LY402761] (100ug) and [LC402761] (20ug) can be purchased separately from OriGene.

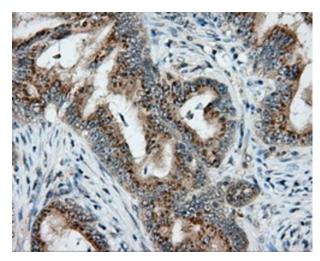


Western blot analysis of extracts (35ug) from 9 different cell lines by using anti-NIT2 monoclonal antibody (HepG2: human; HeLa: human; SVT2: mouse; A549: human; COS7: monkey; Jurkat: human; MDCK: canine; PC12: rat; MCF7: human) (1:200).

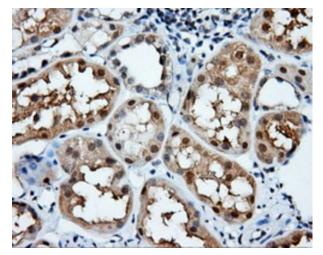




Equivalent amounts of cell lysates (10 ug per lane) of wild-type 293T cells (WT, Cat# LC810293T) and NIT2-Knockout 293T cells (KO, Cat# [LC812235]) were separated by SDS-PAGE and immunoblotted with anti-NIT2 monoclonal antibody TA501097, (1:500). Then the blotted membrane was stripped and reprobed with anti-HSP90AB1 antibody ([TA500494]) as a loading control.

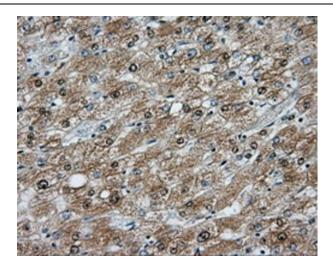


Immunohistochemical staining of paraffinembedded Adenocarcinoma of colon tissue using anti-NIT2 mouse monoclonal antibody. Heatinduced epitope retrieval by EDTA solution buffer pH 8.0 at 120°C for 3 min.

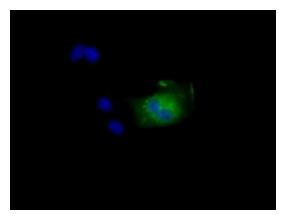


Immunohistochemical staining of paraffinembedded Kidney tissue within the normal limits using anti-NIT2 mouse monoclonal antibody. Heat-induced epitope retrieval by EDTA solution buffer pH 8.0 at 120°C for 3 min.

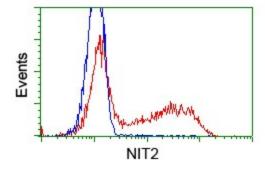




Immunohistochemical staining of paraffinembedded liver tissue within the normal limits using anti-NIT2 mouse monoclonal antibody. ([TA501098], Dilution 1:50; heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 100°C for 10min). Heat-induced epitope retrieval by EDTA solution buffer pH 8.0 at 120°C for 3 min.



Anti-NIT2 mouse monoclonal antibody (TA501097) immunofluorescent staining of COS7 cells transiently transfected by pCMV6-ENTRY NIT2 ([RC210660]).



HEK293T cells transfected with either pCMV6-ENTRY NIT2 ([RC210660]) (Red) or empty vector control plasmid (Blue) were immunostained with anti-NIT2 mouse monoclonal (TA501097), and then analyzed by flow cytometry.