

## Product datasheet for **CF501097**

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

#### **Product data:**

<b>Product Type:</b>	Primary Antibodies
<b>Clone Name:</b>	OTI3D5
<b>Applications:</b>	FC, IF, IHC, WB
<b>Recommended Dilution:</b>	WB 1:2000, IHC 1:50, IF 1:100, Flow 1:100
<b>Reactivity:</b>	Human, Mouse, Rat
<b>Host:</b>	Mouse
<b>Isotype:</b>	IgG2b
<b>Clonality:</b>	Monoclonal
<b>Immunogen:</b>	Full length human recombinant protein of human NIT2 (NP_064587) produced in HEK293T cell.
<b>Formulation:</b>	Lyophilized powder (original buffer 1X PBS, pH 7.3, 8% trehalose)
<b>Reconstitution Method:</b>	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)
<b>Purification:</b>	Purified from mouse ascites fluids or tissue culture supernatant by affinity chromatography (protein A/G)
<b>Conjugation:</b>	Unconjugated
<b>Storage:</b>	Store at -20°C as received.
<b>Stability:</b>	Stable for 12 months from date of receipt.
<b>Predicted Protein Size:</b>	30.4 kDa
<b>Gene Name:</b>	Homo sapiens nitrilase family member 2 (NIT2), mRNA.
<b>Database Link:</b>	<a href="#">NP_064587</a> <a href="#">Entrez Gene 52633 Mouse</a> <a href="#">Entrez Gene 288174 Rat</a> <a href="#">Entrez Gene 56954 Human</a> <a href="#">Q9NQR4</a>

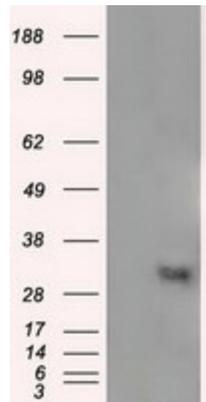


[View online »](#)

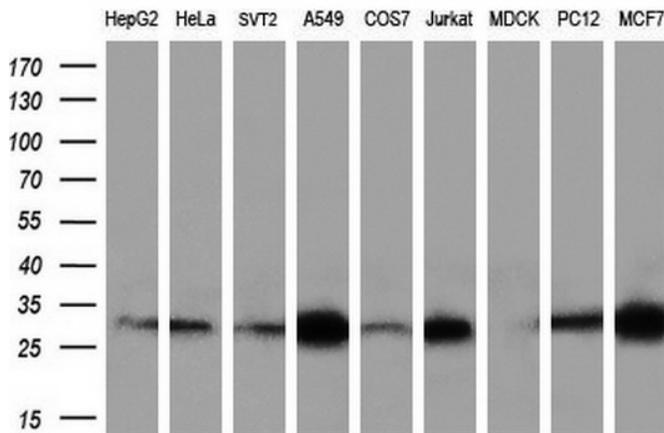
**Background:** Has a omega-amidase activity. The role of omega-amidase is to remove potentially toxic intermediates by converting alpha-ketoglutaramate and alpha-ketosuccinamate to biologically useful alpha-ketoglutarate and oxaloacetate, respectively. Overexpression decreases the colony-forming capacity of cultured cells by arresting cells in the G2 phase of the cell cycle

**Synonyms:** HEL-S-8a

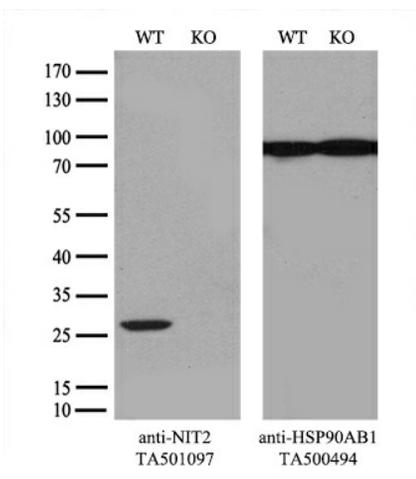
**Product images:**



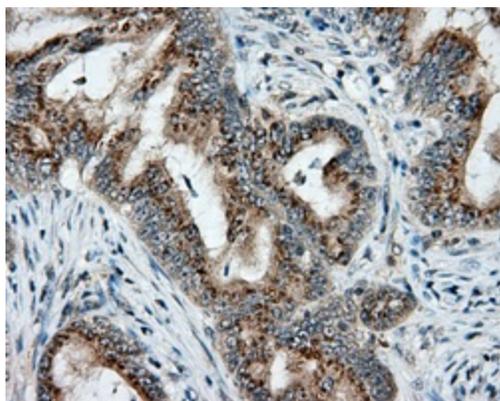
HEK293T cells were transfected with the pCMV6-ENTRY control (Left lane) or pCMV6-ENTRY NIT2 ([RC210660], Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-NIT2. Positive lysates [LY402761] (100ug) and [LC402761]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



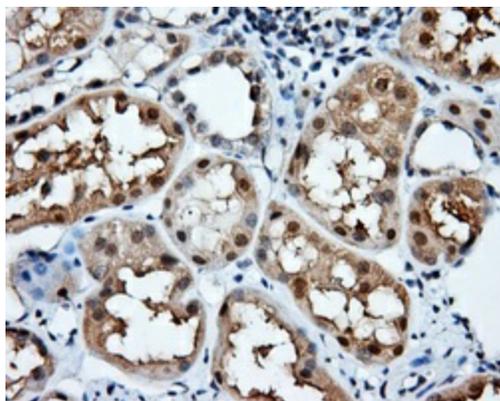
Western blot analysis of extracts (35ug) from 9 different cell lines by using anti-NIT2 monoclonal antibody (HepG2: human; HeLa: human; SVT2: mouse; A549: human; COS7: monkey; Jurkat: human; MDCK: canine; PC12: rat; MCF7: human) (1:200).



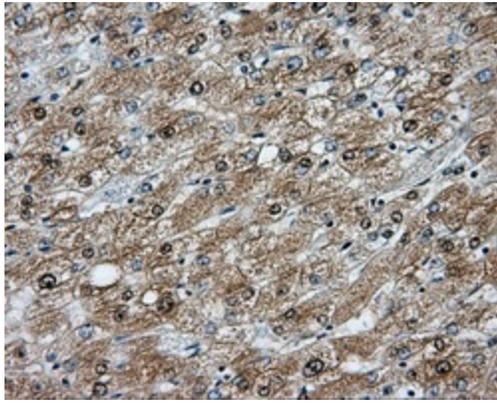
Equivalent amounts of cell lysates (10 ug per lane) of wild-type 293T cells (WT, Cat# LC810293T) and NIT2-Knockout 293T cells (KO, Cat# [LC812235]) were separated by SDS-PAGE and immunoblotted with anti-NIT2 monoclonal antibody [TA501097], (1:500). Then the blotted membrane was stripped and reprobed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



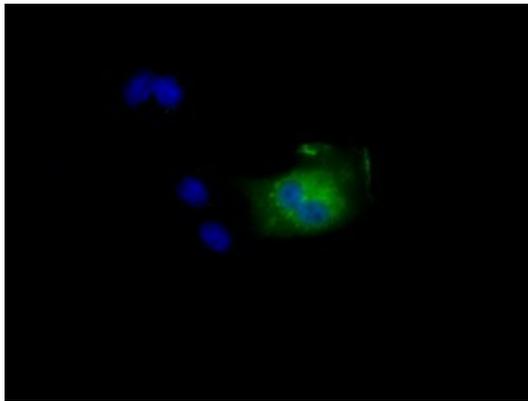
Immunohistochemical staining of paraffin-embedded Adenocarcinoma of colon tissue using anti-NIT2 mouse monoclonal antibody. (Heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 100°C for 10min, [TA501097], Dilution 1:50)



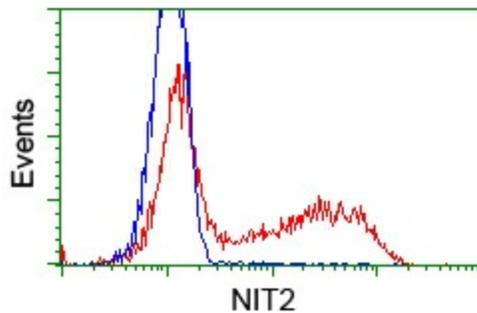
Immunohistochemical staining of paraffin-embedded Kidney tissue within the normal limits using anti-NIT2 mouse monoclonal antibody. (Heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 100°C for 10min, [TA501097], Dilution 1:50)



Immunohistochemical staining of paraffin-embedded 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)



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.