

## Product datasheet for TP310660M

### NIT2 (NM\_020202) Human Recombinant Protein

#### Product data:

Product Type:	Recombinant Proteins
Description:	Recombinant protein of human nitrilase family, member 2 (NIT2), 100 µg
Species:	Human
Expression Host:	HEK293T
Expression cDNA Clone or AA Sequence:	>RC210660 protein sequence <b>Red</b> =Cloning site <b>Green</b> =Tags(s)

MTSFRLLALIQQLQISSIKSDNVTRACSFIREAATQGAKIVSLPECFNSPYGAKYFPEYAEKIPGESTQKLS  
EVAKECSIYLLIGGSIPPEEDAGKLYNTCAVFGPDGTLAKYRKIHLFDIDVPGKITTFQESKTLSPGDSFST  
FDTPYCRVGLGICYDMRFAELAQIYAQRGCQLLVYPGAFNLTTGPAHWELLQRSRAVDNQVYVATASPAR  
DDKASYVAWGHSTVWNPWGEVLAKAGTEEAIVYSIDLKLAIRQQIPVFRQKRSDLYAVEMKPK

**TRTRPLEQKLISEEDLAANDILDYKDDDDKV**

Tag:	C-Myc/DDK
Predicted MW:	30.4 kDa
Concentration:	>0.05 µg/µL as determined by microplate BCA method
Purity:	> 80% as determined by SDS-PAGE and Coomassie blue staining
Buffer:	25 mM Tris-HCl, 100 mM glycine, pH 7.3, 10% glycerol
Bioactivity:	Enzyme activity (PMID: <a href="#">28358347</a> )
Preparation:	Recombinant protein was captured through anti-DDK affinity column followed by conventional chromatography steps.
Note:	For testing in cell culture applications, please filter before use. Note that you may experience some loss of protein during the filtration process.
Storage:	Store at -80°C.
Stability:	Stable for 12 months from the date of receipt of the product under proper storage and handling conditions. Avoid repeated freeze-thaw cycles.
RefSeq:	<a href="#">NP_064587</a>
Locus ID:	56954



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UniProt ID: [Q9NQR4](#), [V9HW91](#)

RefSeq Size: 1271

Cytogenetics: 3q12.2

RefSeq ORF: 828

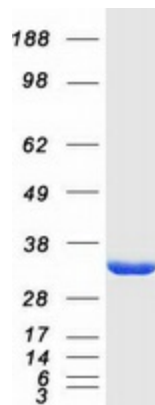
Synonyms: HEL-S-8a

**Summary:** 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. [UniProtKB/Swiss-Prot Function]

### Product images:

Substrate	Enzyme Added (ng)	Specific Activity $\mu\text{mol}/\text{min}/\text{mg}$ <sup>a</sup>
2-Oxoglutaramate (2-OGM) <sup>b</sup>	72.8	$3.0 \pm 0.9$ (3)
Succinamate <sup>c</sup>	146	$3.4 \pm 0.3$ (3)
L-2-Hydroxyglutaramate (L-2-HGM) <sup>c</sup>	291	$1.4 \pm 0.1$ (7)
L-2-Hydroxysuccinamate (L-2-HSM) <sup>d</sup>	146	$0.51 \pm 0.18$ (5)

The specific activity of different substrates of human Nit 2 (OriGene [TP310660]). a: the number of replicates is shown in parenthesis. Figure cited from Biology (Basel), PMID: 28358347



Coomassie blue staining of purified NIT2 protein (Cat# [TP310660]). The protein was produced from HEK293T cells transfected with NIT2 cDNA clone (Cat# [RC210660]) using MegaTran 2.0 (Cat# [TT210002]).