

Product datasheet for **TP310660**

NIT2 (NM_020202) Human Recombinant Protein

Product data:

Product Type: Recombinant Proteins

Description: Recombinant protein of human nitrilase family, member 2 (NIT2), 20 µg

Species: Human

Expression Host: HEK293T

**Expression cDNA Clone
or AA Sequence:** >RC210660 protein sequence
Red=Cloning site **Green**=Tags(s)

MTSFRLLALIQQLQISSIKSDNVTRACSFIREAATQGAKIVSLPECFNSPYGAKYFPEYAEKIPGESTQKLS
EVAKECSIYLLIGGSIPPEEDAGKLYNTCAVFGPDGTLAKYRKIHLFDIDVPGKITFQESKTLSPGDSFST
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: [28358347](#))

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: [NP_064587](#)

Locus ID: 56954



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UniProt ID: [Q9NQR4](#)

RefSeq Size: 1271

Cytogenetics: 3q12.2

RefSeq ORF: 828

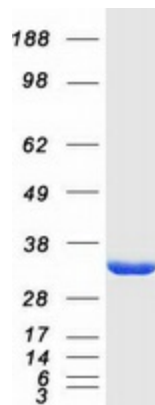
Synonyms: HEL-S-8a

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 $\mu\text{mol}/\text{min}/\text{mg}$ ^a |
|---|-------------------|---|
| 2-Oxoglutaramate (2-OGM) ^b | 72.8 | 3.0 ± 0.9 (3) |
| Succinamate ^c | 146 | 3.4 ± 0.3 (3) |
| L-2-Hydroxyglutaramate (L-2-HGM) ^c | 291 | 1.4 ± 0.1 (7) |
| L-2-Hydroxysuccinamate (L-2-HSM) ^d | 146 | 0.51 ± 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]).