

## Product datasheet for TP308683

### PEG10 (NM\_001040152) Human Recombinant Protein

#### Product data:

**Product Type:** Recombinant Proteins  
**Description:** Recombinant protein of human paternally expressed 10 (PEG10), transcript variant 1, 20 µg  
**Species:** Human  
**Expression Host:** HEK293T  
**Expression cDNA** >RC208683 protein sequence  
**Clone or AA Sequence:** Red=Cloning site Green=Tags(s)

MTERRRDELSEIINNLRKVMKQSENNNLQSQVQKLTEENTTLREQVEPTPEDEDDDIELRGAAAAAAP  
 PPPIEEECPEDLPEKFDGNPDMLAPFMAQCQIFMEKSTRDFSVDVRVRCFVTSMMTGRAARWASAKLERS  
 HYLMHNYPAFMMEMKHVFEDPQRREVAKRKIRRLRQGMGSVIDYSNAFQMIAQDLWDNEPALIDQYHEGL  
 SDHIQEELSHLEVAKSLSALIGQCIHIERRLAAAAARKPRSPPRALVLPHIASHHQVDPTEPVGGARMR  
 LTQEEKERRRKLNLCLYCGTGGHYADNCPAKASKSSPAGNSPAPL

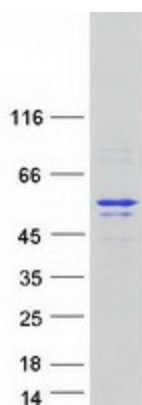
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Tag:** C-Myc/DDK  
**Predicted MW:** 36.8 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  
**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\\_001035242](#)  
**Locus ID:** 23089


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UniProt ID:	<u>Q86TG7</u>
RefSeq Size:	6628
Cytogenetics:	7q21.3
RefSeq ORF:	975
Synonyms:	EDR; HB-1; Mar2; Mart2; MEF3L; RGAG3; RTL2; SIRH1
Summary:	<p>This is a paternally expressed imprinted gene that is thought to have been derived from the Ty3/Gypsy family of retrotransposons. It contains two overlapping open reading frames, RF1 and RF2, and expresses two proteins: a shorter, gag-like protein (with a CCHC-type zinc finger domain) from RF1; and a longer, gag/pol-like fusion protein (with an additional aspartic protease motif) from RF1/RF2 by -1 translational frameshifting (-1 FS). While -1 FS has been observed in RNA viruses and transposons in both prokaryotes and eukaryotes, this gene represents the first example of -1 FS in a eukaryotic cellular gene. This gene is highly conserved across mammalian species and retains the heptanucleotide (GGGAAAC) and pseudoknot elements required for -1 FS. It is expressed in adult and embryonic tissues (most notably in placenta) and reported to have a role in cell proliferation, differentiation and apoptosis. Overexpression of this gene has been associated with several malignancies, such as hepatocellular carcinoma and B-cell lymphocytic leukemia. Knockout mice lacking this gene showed early embryonic lethality with placental defects, indicating the importance of this gene in embryonic development. Additional isoforms resulting from alternatively spliced transcript variants, and use of upstream non-AUG (CUG) start codon have been reported for this gene. [provided by RefSeq, Oct 2014]</p>

## Product images:



Coomassie blue staining of purified PEG10 protein (Cat# TP308683). The protein was produced from HEK293T cells transfected with PEG10 cDNA clone (Cat# [RC208683]) using MegaTran 2.0 (Cat# [TT210002]).