

## Product datasheet for **TP301413**

### FZR1 (NM\_016263) Human Recombinant Protein

#### Product data:

**Product Type:** Recombinant Proteins  
**Description:** Recombinant protein of human fizzy/cell division cycle 20 related 1 (Drosophila) (FZR1), transcript variant 2, 20 µg  
**Species:** Human  
**Expression Host:** HEK293T  
**Expression cDNA Clone or AA Sequence:** >RC201413 protein sequence  
**Red**=Cloning site **Green**=Tags(s)

MDQDYERRLLRQIVIQNENTMPRVTEMRRTLTPASSPVSSPSKHGDRFIPSRAGANWSVNFHRINENEKS  
PSQNRKAKDATSDNGKDGGLAYSALLKNELLGAGIEKVQDPQTEDRRLQPSTPEKKGLFTYSLSTKRSSPD  
DGNDVSPYSLSPVSNKSQKLLRSPRKPTRKISKIPFKVLDAPQLQDDFYLNLDVWSSLNVLVSVGLGTCVY  
LWSACTSQVTRLCDLSVEGDSVTSVGVWSEGRNLVAVGTHKGFVQIWDAAAGKKLSMLEGHTARV GALAWN  
AEQLSSGSRDRMILQRDIRTPPLQSERRLQGHRQEVCGLKWSTDHQLLASGGNDNKL VWNHSSLSPVQQ  
YTEHLAAVKAIWSPHQHGLLASGGGTADRCIRFWNTLTGQPLQCIDTGSQVCNLAWSKHANELVSTHGY  
SQNQILVWKYPSLTQVAKLTGHSYRVLYLAMSPDGEAIVTGAGDETLRFWNVFSKTRSTKESVSVLNLFT  
RIR

**SGPTRTRPLEQKLISEEDLAANDILDYKDDDDKV**

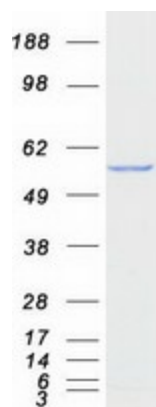
**Tag:** C-Myc/DDK  
**Predicted MW:** 54.6 kDa  
**Concentration:** >0.05 µg/µL as determined by microplate BCA method  
**Purity:** > 80% as determined by SDS-PAGE and Coomassie blue staining  
**Buffer:** 25 mM Tris-HCl, 100 mM glycine, pH 7.3, 10% glycerol  
**Preparation:** Recombinant protein was 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.



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<b>Stability:</b>	Stable for 12 months from the date of receipt of the product under proper storage and handling conditions. Avoid repeated freeze-thaw cycles.
<b>RefSeq:</b>	<a href="#">NP_057347</a>
<b>Locus ID:</b>	51343
<b>UniProt ID:</b>	<a href="#">Q9UM11</a>
<b>RefSeq Size:</b>	3615
<b>Cytogenetics:</b>	19p13.3
<b>RefSeq ORF:</b>	1479
<b>Synonyms:</b>	CDC20C; CDH1; FZR; FZR2; HCDH; HCDH1
<b>Summary:</b>	Substrate-specific adapter for the anaphase promoting complex/cyclosome (APC/C) E3 ubiquitin-protein ligase complex. Associates with the APC/C in late mitosis, in replacement of CDC20, and activates the APC/C during anaphase and telophase. The APC/C remains active in degrading substrates to ensure that positive regulators of the cell cycle do not accumulate prematurely. At the G1/S transition FZR1 is phosphorylated, leading to its dissociation from the APC/C. Following DNA damage, it is required for the G2 DNA damage checkpoint: its dephosphorylation and reassociation with the APC/C leads to the ubiquitination of PLK1, preventing entry into mitosis. Acts as an adapter for APC/C to target the DNA-end resection factor RBBP8/CtIP for ubiquitination and subsequent proteasomal degradation. Through the regulation of RBBP8/CtIP protein turnover, may play a role in DNA damage response, favoring DNA double-strand repair through error-prone non-homologous end joining (NHEJ) over error-free, RBBP8-mediated homologous recombination (HR) (PubMed:25349192).[UniProtKB/Swiss-Prot Function]
<b>Protein Families:</b>	Druggable Genome
<b>Protein Pathways:</b>	Cell cycle, Progesterone-mediated oocyte maturation, Ubiquitin mediated proteolysis

### Product images:



Coomassie blue staining of purified FZR1 protein (Cat# TP301413). The protein was produced from HEK293T cells transfected with FZR1 cDNA clone (Cat# [RC201413]) using MegaTran 2.0 (Cat# [TT210002]).