

# Product datasheet for TP306527M

## HCAR2 (NM\_177551) Human Recombinant Protein

### **Product data:**

#### **Product Type: Recombinant Proteins Description:** Recombinant protein of human niacin receptor 1 (NIACR1), 100 µg Species: Human HEK293T **Expression Host:** Expression cDNA Clone >RC206527 protein sequence or AA Sequence: Red=Cloning site Green=Tags(s) MNRHHLQDHFLEIDKKNCCVFRDDFIVKVLPPVLGLEFIFGLLGNGLALWIFCFHLKSWKSSRIFLFNLA VADFLLIICLPFLMDNYVRRWDWKFGDIPCRLMLFMLAMNRQGSIIFLTVVAVDRYFRVVHPHHALNKIS NRTAAIISCLLWGITIGLTVHLLKKKMPIQNGGANLCSSFSICHTFQWHEAMFLLEFFLPLGIILFCSAR IIWSLRQRQMDRHAKIKRAITFIMVVAIVFVICFLPSVVVRIRIFWLLHTSGTQNCEVYRSVDLAFFITL SFTYMNSMLDPVVYYFSSPSFPNFFSTLINRCLQRKMTGEPDNNRSTSVELTGDPNKTRGAPEALMANSG **EPWSPSYLGPTSP TRTRPLEQKLISEEDLAANDILDYKDDDDKV** Tag: C-Myc/DDK Predicted MW: 41.7 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:** Surface Plasmon Ressonance (SPR) (PMID: 29473951) **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. Stable for 12 months from the date of receipt of the product under proper storage and Stability: handling conditions. Avoid repeated freeze-thaw cycles. RefSeq: NP 808219



This product is to be used for laboratory only. Not for diagnostic or therapeutic use. ©2023 OriGene Technologies, Inc., 9620 Medical Center Drive, Ste 200, Rockville, MD 20850, US

### OriGene Technologies, Inc.

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	CAR2 (NM_177551) Human Recombinant Protein – TP306527M	
Locus ID:	338442	
UniProt ID:	<u>Q8TDS4, A0A4Y1JWQ0</u>	
RefSeq Size:	2082	
Cytogenetics:	12q24.31	
RefSeq ORF:	1089	
Synonyms:	GPR109A; HCA2; HM74a; HM74b; NIACR1; Puma-g; PUMAG	
Summary:	Acts as a high affinity receptor for both nicotinic acid (also known as niacin) and (D)-beta- hydroxybutyrate and mediates increased adiponectin secretion and decreased lipolysis through G(i)-protein-mediated inhibition of adenylyl cyclase. This pharmacological effect requires nicotinic acid doses that are much higher than those provided by a normal diet. Mediates nicotinic acid-induced apoptosis in mature neutrophils. Receptor activation by nicotinic acid results in reduced cAMP levels which may affect activity of cAMP-dependent protein kinase A and phosphorylation of target proteins, leading to neutrophil apoptosis. The rank order of potency for the displacement of nicotinic acid binding is 5-methyl pyrazole-3- carboxylic acid = pyridine-3-acetic acid > acifran > 5-methyl nicotinic acid = acipimox >> nicotinuric acid = nicotinamide.[UniProtKB/Swiss-Prot Function]	
Protein Families	: Druggable Genome, GPCR, Transmembrane	

## Product images:

116 —	-	-
66 —	1	
45 —	-	-
35 —		
25 —		
18 —		
14 —		

Coomassie blue staining of purified HCAR2 protein (Cat# [TP306527]). The protein was produced from HEK293T cells transfected with HCAR2 cDNA clone (Cat# [RC206527]) using MegaTran 2.0 (Cat# [TT210002]).

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