

## 42701.Mouse N-fatty-acyl-amino acid synthase/ hydrolase PM20D1

Origin:	Recombinant	Cat. No.:	42701
Tag:	C-terminal 6xHis	Size:	0.1 mg
Source:	HEK293	Purity:	>95%
Other names:	PM20D1	Species:	Mouse

### Description

Expressed in HEK293 cells with total 516 AA. Mw: 57.34 KDa (calculated). C-terminal 6xHis-tag and TEV cleavage site, 13 extra AA (highlighted).

Recombinant antigen for research use or manufacturing only.

### Introduction to the Molecule

PM20D1 is a bidirectional N-fatty-acyl amino acid synthase/hydrolase that regulates the production of N-fatty-acyl amino acids. These metabolites are endogenous chemical uncouplers of mitochondrial respiration. In an UCP1-independent manner, maybe through interaction with mitochondrial transporters, they promote proton leakage into the mitochondrial matrix. PM20D1 may indirectly regulate the bodily dissipation of chemical energy as heat through thermogenic respiration.

### Amino Acid Sequence

MAELLASLPAAVAVLLFFATVSGSTGPRSRENRGASRIPSQFSEEERVAIKEALKGAIQIPTVSFS  
HEESNTTALAEFGGEYIRKAFPTVFHSSLVQHEVVAKYSHLFTIQGSDPSLQPYMLMAHIDVVPAP  
EEGWEVPPFSGLERNGFIYGRGALDNKNSVMAILHALELLLRNYSFKRSFFIALGHDEEVSGEK  
GAQKISALLQARGVQLAFLVDEGSFILEGFIPNLEKPVAMISVTEKGALDMLQVNMTPGHSSAP  
PKETSIGILSAAVSRLEQTPMPNMFGGGPLKKTMKLLANEFSPINIVLRNLWLFHPIVSRIMERNP  
ITNALVRTTTALTMFNAGIKVNVIPPLAQTINCRIHPSQTVHEVLELVKNTVADDRVQLHVLRS  
FEPLPISPSDDQAMGYQLLQETIRSVFPEVDIVVPGICIANTDTRHYANITNGMYRFNPLPLNPQDF  
SGVHGINEKVSQNYQNQVKFIFEFIQNADTYKEPVPHLHELENLYFQGHHHHHH

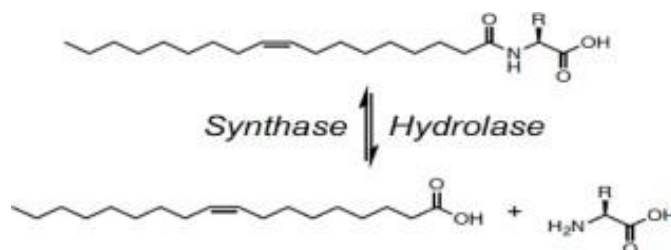
### Formulation

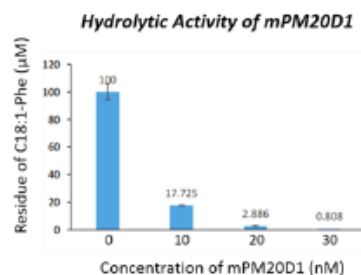
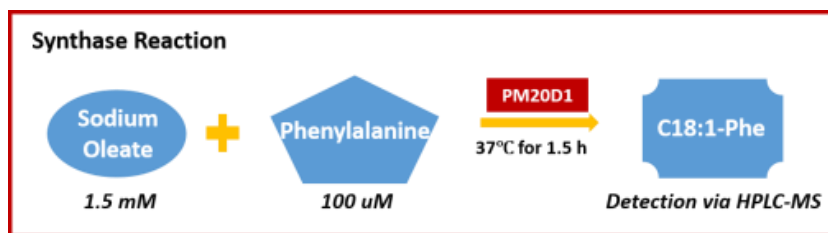
Lyophilized at 1 mg/mL in NaCl 500mM, KCl 2.7mM, Na<sub>2</sub>HPO<sub>4</sub> 10mM, KH<sub>2</sub>PO<sub>4</sub> 1.8mM, pH 8.0.

### Endotoxin Level

<0.2 EU per 1 µg of the protein by the LAL method.

### Bioactivity Test





## Reconstitution

Add deionized water to prepare a working stock solution of approximately 1 mg/mL and let the lyophilized pellet dissolve completely.

## Storage

Store lyophilized protein at  $-20^{\circ}\text{C}$ . Aliquot reconstituted protein and store at  $-80^{\circ}\text{C}$ . Avoid repeated freezing /thawing cycles.

## Quality Control Test

BCA to determine quantity of the protein. SDS PAGE to determine purity of the protein.

## SDS-PAGE gel

