SUITE 203, 17 Ramsey Road, Shirley, NY 11967, USA
Tel: 1-631-416-1478 Fax: 1-631-207-8356
Email: info@creative-biolabs.com
www.creative-biolabs.com

Product Information

MemDX™ Membrane Protein Human ZP3 (Zona pellucida glycoprotein 3) Full Length

Cat. No.: **MPC2152K**
This product is for research use only and is not intended for diagnostic use.

This product is a 47 kDa Human ZP3 membrane protein expressed in HEK293. The protein is for research use only and is not approved for use in humans or in clinical diagnosis.

Product Specifications

Host Species
Human

Target Protein
ZP3

Protein Length
Full length

Protein Class
Receptor

Molecular Weight
47 kDa

TMD
1

Sequence
MELSYRLFICLLLWGSTELCYPQPLWLLQGGASHPETSVQPVLVECQEAT
LMVMVSKDLFGTGKLIRAADLTLGPEACEPLVSMDTEDVVRFEVGLHECG
NSMQVTDDALVYSTFLLHDPRPVGNLSIVRTNRAEIPIECRYPRQGNVSS
QAILPTWLPFRTTVFSEEKLTFSLRLMEENWNAEKRSPTFHLGDAAHLQA
EIHTGSHVPLRLFVDHCVATPTPDQNASPYHTIVDFHGCLVDGLTDASSA
FKVPRPGPDTLQFTVDVFHFANDSRNMIYITCHLKVTLAEQDPDELNKAC
SFSKPSNSWFPVEGSADICQCCNKGDCGTPSHSRRQPHVMSQWSRSASRN
RRHVTEEADVTVGPLIFLDRRGDHEVEQWALPSDTSVVLLGVGLAVVVSL
TLTAVILVLTRRCRTASHPVSASE

Product Description

Expression Systems
HEK293

Tag
Based on specific requirements

Protein Format

Detergent or based on specific requirements

Form

Liquid

Storage

Aliquot and store at -20°C or lower. For long term storage, we recommend to store at -72°C or lower. Avoid freeze/thaw cycles.

Target

Target Protein

ZP3

Full Name

Zona pellucida glycoprotein 3

Introduction

The zona pellucida is an extracellular matrix that surrounds the oocyte and early embryo. It is composed primarily of three or four glycoproteins with various functions during fertilization and preimplantation development. The protein encoded by this gene is a structural component of the zona pellucida and functions in primary binding and induction of the sperm acrosome reaction. The nascent protein contains a N-terminal signal peptide sequence, a conserved ZP domain, a C-terminal consensus furin cleavage site, and a transmembrane domain. It is hypothesized that furin cleavage results in release of the mature protein from the plasma membrane for subsequent incorporation into the zona pellucida matrix. However, the requirement for furin cleavage in this process remains controversial based on mouse studies. A variation in the last exon of this gene has previously served as the basis for an additional ZP3 locus; however, sequence and literature review reveals that there is only one full-length ZP3 locus in the human genome. Another locus encoding a bipartite transcript designated POMZP3 contains a duplication of the last four exons of ZP3, including the above described variation, and maps closely to this gene.

Alternative Names

ZP3; ZPC; ZP3A; ZP3B; Zp-3; OOMD3; zona pellucida sperm-binding protein 3; ZP3A/ZP3B; sperm receptor; zona pellucida glycoprotein 3B; zona pellucida glycoprotein ZP3; zona pellucida protein C; Zona pellucida glycoprotein 3

Gene ID

7784

UniProt ID

P21754

SUITE 203, 17 Ramsey Road, Shirley, NY 11967, USA
Tel: 1-631-416-1478 Fax: 1-631-207-8356
Email: info@creative-biolabs.com