

## Product Information

### MemDX™ Membrane Protein Human ATP6V1A (ATPase H<sup>+</sup> transporting V1 subunit A) for Antibody Discovery

Cat. No.: **MP0101X**

This product is for research use only and is not intended for diagnostic use.

This product is a 93.5 kDa Human ATP6V1A membrane protein expressed in *in vitro* wheat germ expression system. 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

ATP6V1A

##### Protein Length

Full-length

##### Molecular Weight

93.5 kDa

##### Sequence

MDFSKLPKILDEDKSTFGYVHGVSGPVVTACDMAGAAMYELVRVGHSELVGEIIRLEGDMATIQVYEETSGVSVGDPVLRGTGKPL

#### Product Description

##### Application

Enzyme-linked Immunoabsorbent Assay, Western Blot (Recombinant protein), Antibody Production, Protein Array

##### Expression Systems

*in vitro* wheat germ expression system

##### Tag

GST-tag at N-terminal

##### Form

Liquid

##### Purification

Glutathione Sepharose 4 Fast Flow

##### Buffer

50 mM Tris-HCl, 10 mM reduced Glutathione, pH=8.0 in the elution buffer

### Storage

Store at +4°C for up to one week or several months at -80°C

### Target

#### Target Protein

ATP6V1A

#### Full Name

ATPase H<sup>+</sup> transporting V1 subunit A

#### Introduction

This gene encodes a component of vacuolar ATPase (V-ATPase), a multisubunit enzyme that mediates acidification of eukaryotic intracellular organelles. V-ATPase dependent organelle acidification is necessary for such intracellular processes as protein sorting, zymogen activation, receptor-mediated endocytosis, and synaptic vesicle proton gradient generation. V-ATPase is composed of a cytosolic V1 domain and a transmembrane V0 domain. The V1 domain consists of three A and three B subunits, two G subunits plus the C, D, E, F, and H subunits. The V1 domain contains the ATP catalytic site. The V0 domain consists of five different subunits: a, c, c', c", and d. Additional isoforms of many of the V1 and V0 subunit proteins are encoded by multiple genes or alternatively spliced transcript variants. This encoded protein is one of two V1 domain A subunit isoforms and is found in all tissues. Transcript variants derived from alternative polyadenylation exist

#### Alternative Names

ATP6A1; ATP6V1A1; HO68; VA68; VPP2; Vma1; ATPase, H<sup>+</sup> transporting, lysosomal 70kD, V1 subunit A, isoform 1; ATPase, H<sup>+</sup> transporting, lysosomal, alpha polypeptide, 70kD, isoform 1; ATPase, H<sup>+</sup> transporting, lysosomal, subunit A1; H(+)-transporting two-sector ATPase, subunit A,H<sup>+</sup>-transporting ATPase ch

#### Gene ID

[523](#)

#### UniProt ID

[P38606](#)