

# Product Information

## **MemDX™ Membrane Protein Human VKORC1 (Vitamin K epoxide reductase complex subunit 1)**

Cat. No.: **MP0282J**

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

This product is a 9.7 kDa Human VKORC1 membrane protein expressed in HEK293T. 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**

VKORC1

#### **Protein Length**

Full-length

#### **Protein Class**

Transmembrane

#### **Molecular Weight**

9.7 kDa

#### **TMD**

4

#### **Sequence**

MGSTWGSPPGWRLALCLTGLVLSLYALHVKAARARDRDYRALCDVGTAISSSRVFSSRLPADTLGLCPDA  
AELPGVSRWFCLPGLDPVLRAL

### Product Description

#### **Expression Systems**

HEK293T

#### **Tag**

C-Myc/DDK

#### **Form**

Liquid

#### **Purification**

Anti-DDK affinity column followed by conventional chromatography steps

**Purity**

> 80% as determined by SDS-PAGE and Coomassie blue staining

**Buffer**

25 mM Tris.HCl, pH 7.3, 100 mM glycine, 10% glycerol

**Storage**

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

**Target****Target Protein**

VKORC1

**Full Name**

Vitamin K epoxide reductase complex subunit 1

**Introduction**

This gene encodes the catalytic subunit of the vitamin K epoxide reductase complex, which is responsible for the reduction of inactive vitamin K 2,3-epoxide to active vitamin K in the endoplasmic reticulum membrane. Vitamin K is a required co-factor for carboxylation of glutamic acid residues by vitamin K-dependent gamma-carboxylase in blood-clotting enzymes. Allelic variation in this gene is associated with vitamin k-dependent clotting factors combined deficiency of 2, and increased resistance or sensitivity to warfarin, an inhibitor of vitamin K epoxide reductase. Pseudogenes of this gene are located on chromosomes 1 and X. Alternative splicing results in multiple transcript variants.

**Alternative Names**

EDTP308; MST134; MST576; VKCFD2; VKOR; phyloquinone epoxide reductase; vitamin K dependent clotting factors deficiency 2

**Gene ID**

[79001](#)

**UniProt ID**

[Q9BQB6](#)