

# **Product Information**

# MemDX™ Membrane Protein Human KIT (KIT proto-oncogene, receptor tyrosine kinase) for Antibody Discovery

Cat. No.: MP0135Q

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

This product is a 48.7 kDa Human KIT membrane protein expressed in Sf9. 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**

**KIT** 

## **Protein Length**

**Partial** 

### **Protein Class**

Adult stem cells, Druggable Genome, Embryonic stem cells, ES Cell Differentiation/IPS, Protein Kinase, Stem cell - Pluripotency, Transmembrane

## **Molecular Weight**

48.7 kDa

#### **TMD**

1

## Sequence

MRGARGAWDFLCVLLLLRVQTGSSQPSVSPGEPSPPSIHPGKSDLIVRVGDEIRLLCTDPGFVKWTFEILDETNENKQNEWITEKA

# **Product Description**

### **Expression Systems**

Sf9

## Tag

C-DDK

#### **Form**

Powder

## **Purity**

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

#### **Buffer**

50mM Tris-HCl, pH8.0, 100mM glycine, 10% glycerol

#### Storage

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

### **Target**

### **Target Protein**

**KIT** 

#### **Full Name**

KIT proto-oncogene, receptor tyrosine kinase

#### Introduction

This gene encodes a receptor tyrosine kinase. This gene was initially identified as a homolog of the feline sarcoma viral oncogene v-kit and is often referred to as proto-oncogene c-Kit. The canonical form of this glycosylated transmembrane protein has an N-terminal extracellular region with five immunoglobulin-like domains, a transmembrane region, and an intracellular tyrosine kinase domain at the C-terminus. Upon activation by its cytokine ligand, stem cell factor (SCF), this protein phosphorylates multiple intracellular proteins that play a role in in the proliferation, differentiation, migration and apoptosis of many cell types and thereby plays an important role in hematopoiesis, stem cell maintenance, gametogenesis, melanogenesis, and in mast cell development, migration and function. This protein can be a membrane-bound or soluble protein. Mutations in this gene are associated with gastrointestinal stromal tumors, mast cell disease, acute myelogenous leukemia, and piebaldism. Multiple transcript variants encoding different isoforms have been found for this gene.

#### **Alternative Names**

mast/stem cell growth factor receptor Kit; c-Kit protooncogene; piebald trait protein; proto-oncogene c-Kit; proto-oncogene tyrosine-protein kinase Kit; soluble KIT variant 1; tyrosine-protein kinase Kit; v-kit Hardy-Zuckerman 4 feline sarcoma viral oncogene-like protein; Mast/stem cell growth factor receptor Kit; SCFR; Piebald trait protein; PBT; p145 c-kit; v-kit Hardy-Zuckerman 4 feline sarcoma viral oncogene homolog; CD117

Gene ID

3815

**UniProt ID** 

P10721