

# Product Information

## MemDX™ Membrane Protein Human KLRK1 (Killer cell lectin like receptor K1) Full Length

Cat. No.: **MPC1939K**

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

This product is a 25.2 kDa Human KLRK1 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

KLRK1

#### Protein Length

Full length

#### Protein Class

Receptor; Immunity

#### Molecular Weight

25.2 kDa

#### TMD

1

#### Sequence

MGWIRGRRSRHSWEMSEFHNYNLDLKKSDFFSTRWQKQRCPPVVKSKCRENA  
SPFFFCFIAVAMGIRFIIMVAIWSAVFLNSLFNQEVQIPLTESYCGPCP  
KNWICYKNNCYQFFDESKNWYESQASCMSQNASLLKVYSKEDQDLLKLVK  
SYHWMGLVHIPTNGSWQWEDGSILSPNLLTIEMQKGDALYASSFKGYI  
ENCSTPNTYICMQRTV

### 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**

KLRK1

**Full Name**

Killer cell lectin like receptor K1

**Introduction**

Natural killer (NK) cells are lymphocytes that can mediate lysis of certain tumor cells and virus-infected cells without previous activation. They can also regulate specific humoral and cell-mediated immunity. NK cells preferentially express several calcium-dependent (C-type) lectins, which have been implicated in the regulation of NK cell function. The NKG2 gene family is located within the NK complex, a region that contains several C-type lectin genes preferentially expressed in NK cells. This gene encodes a member of the NKG2 family. The encoded transmembrane protein is characterized by a type II membrane orientation (has an extracellular C terminus) and the presence of a C-type lectin domain. It binds to a diverse family of ligands that include MHC class I chain-related A and B proteins and UL-16 binding proteins, where ligand-receptor interactions can result in the activation of NK and T cells. The surface expression of these ligands is important for the recognition of stressed cells by the immune system, and thus this protein and its ligands are therapeutic targets for the treatment of immune diseases and cancers. Read-through transcription exists between this gene and the upstream KLRC4 (killer cell lectin-like receptor subfamily C, member 4) family member in the same cluster.

**Alternative Names**

KLRK1; KLR; CD314; NKG2D; NKG2-D; D12S2489E; NKG2-D type II integral membrane protein; NK cell receptor D; NKG2-D-activating NK receptor; killer cell lectin-like receptor subfamily K, member 1; Killer cell lectin like receptor K1

**Gene ID**

[22914](#)

**UniProt ID**

[P26718](#)