

# Product Information

## **MemDX™ Membrane Protein Human KIR2DS3 (Killer cell immunoglobulin like receptor, two Ig domains and short cytoplasmic tail 3) Full Length**

Cat. No.: **MPC2981K**

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

This product is a made-to-order Human KIR2DS3 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

KIR2DS3

#### Protein Length

Full length

#### Protein Class

Receptor

#### TMD

1

#### Sequence

MSLMVISMACVGFFWLQGAWPHEGFRRKPSLLAHPGRLVKSEETVILQCW  
SDVMFEHFLLHREGTFNDTLRLIGEHDGVSKANFSIGRMRQDLAGTYRC  
YGSVPHSPYQFSAPSDPLDIVITGLYEKPSLSAQPGPTVLAGESVTLSCS  
SWSSYDMYHLSTEGEAHERRFSAGPKVNGTFQADFPLGPATQGGTYRCFG  
SFHDSPIYEWKSSDPLLVSVTGNPSNSWPSPTSPSSKTGNPRHLHVLIGT  
SVVKLPFTILLFFLLHRWCSDKKNASVMDQGPAGNRTVNREDSDEQDHQE  
VSYA

### Product Description

#### Expression Systems

HEK293

#### Tag

Based on specific requirements

#### Protein Format

Detergent or based on specific requirements (Detergent, Liposome, Nanodisc, Polymer, VLP)

**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**

KIR2DS3

**Full Name**

Killer cell immunoglobulin like receptor, two Ig domains and short cytoplasmic tail 3

**Introduction**

Killer cell immunoglobulin-like receptors (KIRs) are transmembrane glycoproteins expressed by natural killer cells and subsets of T cells. The KIR genes are polymorphic and highly homologous and they are found in a cluster on chromosome 19q13.4 within the 1 Mb leukocyte receptor complex (LRC). The gene content of the KIR gene cluster varies among haplotypes, although several "framework" genes are found in all haplotypes (KIR3DL3, KIR3DP1, KIR3DL4, KIR3DL2). The KIR proteins are classified by the number of extracellular immunoglobulin domains (2D or 3D) and by whether they have a long (L) or short (S) cytoplasmic domain. KIR proteins with the long cytoplasmic domain transduce inhibitory signals upon ligand binding via an immune tyrosine-based inhibitory motif (ITIM), while KIR proteins with the short cytoplasmic domain lack the ITIM motif and instead associate with the TYRO protein tyrosine kinase binding protein to transduce activating signals. The ligands for several KIR proteins are subsets of HLA class I molecules; thus, KIR proteins are thought to play an important role in regulation of the immune response.

**Alternative Names**

KIR2DS3; NKAT7; killer cell immunoglobulin-like receptor 2DS3; MHC class I NK cell receptor; NKAT-7; killer cell immunoglobulin-like receptor, two domains, short cytoplasmic tail, 3; natural killer cell inhibitory receptor; natural killer-associated transcript 7; Killer cell immunoglobulin like receptor, two Ig domains and short cytoplasmic tail 3

**Gene ID**

[3808](#)

**UniProt ID**

[Q14952](#)