

Product Information

MemDX™ Human KIT (N822K) BaF3 Cell Line

Cat. No.: **S01YF-0324-KX169**

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

Product Information

Target Protein

KIT (N822K)

Target Protein Species

Human

Host Cell Type

BaF3

Target Classification

Kinases/Enzyme

Target Family

Kinases/Enzyme

Target Research Area

Cancer Research

Related Diseases

Piebald Trait; Gastrointestinal Stromal Tumor

Product Properties

Assay Types

Functional assay and biological assay

Stability

16 passages

Mycoplasma Testing

Negative

Biosafety Level

Level 1

Activity

Yes

Form

Frozen cells

Freeze Medium

90% FBS+10% DMSO

Culture Medium

RPML-1640+10%FBS

Selective Antibiotic(s)

Regular antibiotics active against mycoplasmas, bacteria and fungi.

Handling Notes

Frozen cells should be thawed immediately upon receipt and grown according to handling procedure to ensure cell viability and proper assay performance.

Note: Do not freeze the cells upon receipt as it may result in irreversible damage to the cell line.

Disclaimer: We cannot guarantee cell viability if the cells are not thawed immediately upon receipt and grown according to handling procedure.

Incubation

37°C with 5% CO₂

Applications

Anti-proliferation assay and PD assay

Application Notes

Cells were plated in a 384-well plate and incubated overnight at 37°C and 5% CO₂ to allow the cells to attach and grow. Cells were then stimulated with a control for high-throughput drugs screening and functional assays.

Use Restrictions

These cells are distributed for research use only.

Shipping

Dry ice

Storage

Liquid nitrogen

Target

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 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

KIT; PBT; SCFR; C-Kit; CD117; MASTC; mast/stem cell growth factor receptor Kit; c-Kit protooncogene; p145 c-kit;

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 homolog; v-kit Hardy-Zuckerman 4 feline sarcoma viral oncogene-like protein; KIT proto-oncogene, receptor tyrosine kinase

Gene ID

3815

UniProt ID

P10721