ROBO3 Knockout cell line (HCT 116)

Catalog Number: KO06969

Product Information

Product Name	ROBO3 Knockout cell line (HCT 116)
specification	1*10^6
Storage and transportation	Dry ice preservation/T25 live cell transportation.
Cell morphology	Epithelioid, adherent cell
Passage ratio	1:2~1:4
species	Human
Gene	ROBO3
Gene ID	64221
Build method	Electric rotation method / virus method
Mycoplasma testing	Negative
Cultivation system	90%McCOYs 5A+10% FBS
Parental Cell Line	HCT 116
Quality Control	Genotype: ROBO3 Knockout cell line (HCT 116) >95% viability before freezing. All cells were tested and found to be free of bacterial, viruses,mycoplasma and other toxins.

Gene Information

Gene Official Full Name	roundabout guidance receptor 3provided by HGNC
Also known as	HGPS; RIG1; HGPPS; RBIG1; HGPPS1
Gene Description	This gene is a member of the Roundabout (ROBO) gene family that controls neurite outgrowth, growth cone guidance, and axon fasciculation. ROBO proteins are a subfamily of the immunoglobulin transmembrane receptor superfamily. SLIT proteins 1-3, a family of secreted chemorepellants, are ligands for ROBO proteins and SLIT/ROBO interactions regulate myogenesis, leukocyte migration, kidney morphogenesis, angiogenesis, and vasculogenesis in addition to neurogenesis. This gene, ROBO3, has a putative extracellular domain with five immunoglobulin (Ig)-like loops and three fibronectin (Fn) type III motifs, a transmembrane segment, and a cytoplasmic tail with three conserved signaling motifs: CC0, CC2, and CC3 (CC for conserved cytoplasmic). Unlike other ROBO family members, ROBO3 lacks motif CC1. The ROBO3 gene regulates axonal navigation at the ventral midline of the neural tube. In mouse, loss of Robo3 results in a complete failure of commissural axons to cross the midline throughout the spinal cord and the

	hindbrain. Mutations ROBO3 result in horizontal gaze palsy with progressive scoliosis (HGPPS); an autosomal recessive disorder characterized by congenital absence of horizontal gaze, progressive scoliosis, and failure of the corticospinal and somatosensory axon tracts to cross the midline in the medulla. [provided by RefSeq, May 2019]
Expression	Ubiquitous expression in ovary (RPKM 7.2), spleen (RPKM 3.0) and 21 other tissues See more