



Human Robo3 blocking peptide (CDBP2568)

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

PRODUCT INFORMATION

Product Overview	Blocking/Immunizing peptide for anti-ROBO3/RIG1 (internal) antibody
Antigen 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. Alternative transcript variants have been described but have not been experimentally validated. [provided by RefSeq, Dec 2009]
Species	Human
Conjugate	Unconjugated
Applications	Apuri, BL, ELISA
Format	Lyophilized powder
Size	100 µg
Preservative	None

Storage

Shipped at ambient temperature, store at -20°C.

GENE INFORMATION

Gene Name	ROBO3 roundabout, axon guidance receptor, homolog 3 (Drosophila) [Homo sapiens]
Official Symbol	Robo3
Synonyms	ROBO3; roundabout, axon guidance receptor, homolog 3 (Drosophila); HGPPS, horizontal gaze palsy with progressive scoliosis , roundabout (axon guidance receptor, Drosophila) homolog 3; roundabout homolog 3; FLJ21044; HGPS; RBIG1; roundabout-like protein 3; retinoblastoma inhibiting gene 1; RIG1; HGPPS;
Entrez Gene ID	64221
mRNA Refseq	NM_022370
Protein Refseq	NP_071765
UniProt ID	Q96MS0
Chromosome Location	11q24
Pathway	Axon guidance, organism-specific biosystem; Axon guidance, conserved biosystem; Axon guidance, organism-specific biosystem; Developmental Biology, organism-specific biosystem; Regulation of Commissural axon pathfinding by Slit and Robo, organism-specific biosystem; Signaling by Robo receptor, organism-specific biosystem;
Function	protein heterodimerization activity; protein homodimerization activity; receptor activity;