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## Product Information

<b>Product SKU:</b>	CAB14922	<b>Gene ID:</b>	64221	<b>Size:</b>	20uL, 100uL
<b>Clone No:</b>	-	<b>Host Species:</b>	Rabbit	<b>Reactivity:</b>	Human

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## Additional Information

<b>Observed MW:</b>	148kDa	<b>Conjugate:</b>	Unconjugated
<b>Calculated MW:</b>	148kDa	<b>Isotype:</b>	IgG

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## Immunogen Information

**Background:** 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.

**Recommended Dilution:** WB, 1:500 - 1:2000

**Synonyms:** HGPS; RIG1; HGPPS; RBIG1; HGPPS1; ROBO3

**Purification Method:** Affinity purification

**Immunogen:** Recombinant fusion protein containing a sequence corresponding to amino acids 1-147 of human ROBO3 (NP\_071765.2).

**Storage:** Store at -20°C. Avoid freeze / thaw cycles. Buffer: PBS with 0.01% thimerosal, 50% glycerol, pH 7.3.