

Product datasheet for **TA350366**

ROBO3 Rabbit Polyclonal Antibody

Product data:

Product Type:	Primary Antibodies
Applications:	IHC
Recommended Dilution:	IHC: 25-100 Positive control: Human breast cancer Predicted cell location: Cytoplasm
Reactivity:	Human, Mouse
Host:	Rabbit
Isotype:	IgG
Clonality:	Polyclonal
Immunogen:	Fusion protein of human ROBO3
Formulation:	pH7.4 PBS, 0.05% NaN ₃ , 40% Glycerol
Concentration:	lot specific
Purification:	Antigen affinity purification
Conjugation:	Unconjugated
Storage:	Store at -20°C as received.
Stability:	Stable for 12 months from date of receipt.
Gene Name:	roundabout guidance receptor 3
Database Link:	NP_071765 Entrez Gene 64221 Human Q96MS0



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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. Alternative transcript variants have been described but have not been experimentally validated.

Synonyms:

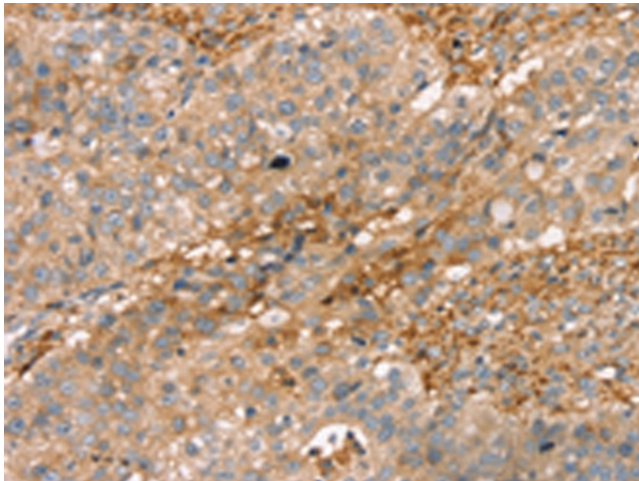
HGPPS; HGPS; RBIG1; RIG1

Protein Families:

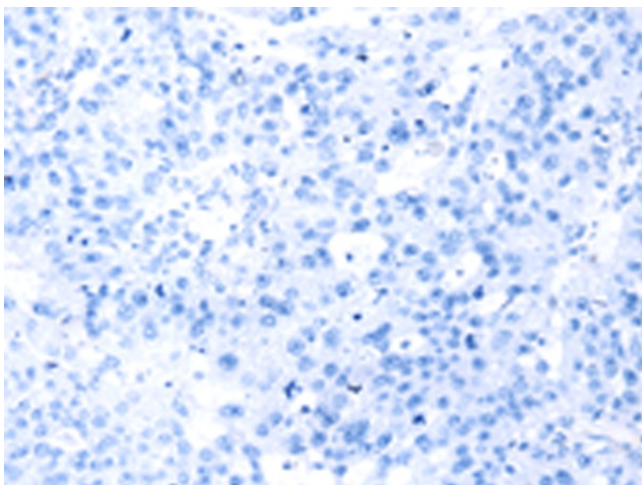
Druggable Genome

Protein Pathways:

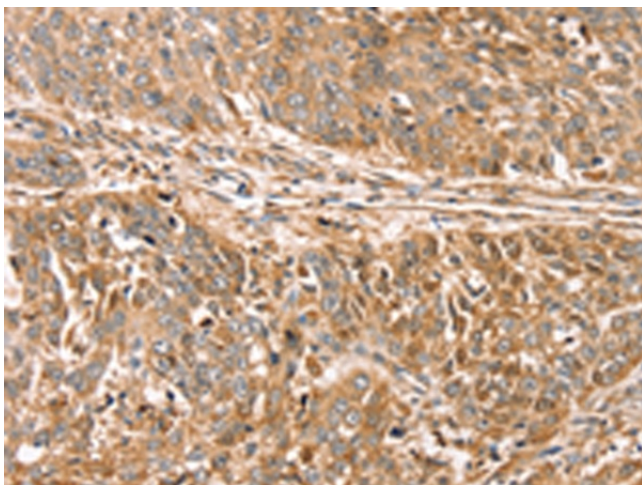
Axon guidance

Product images:

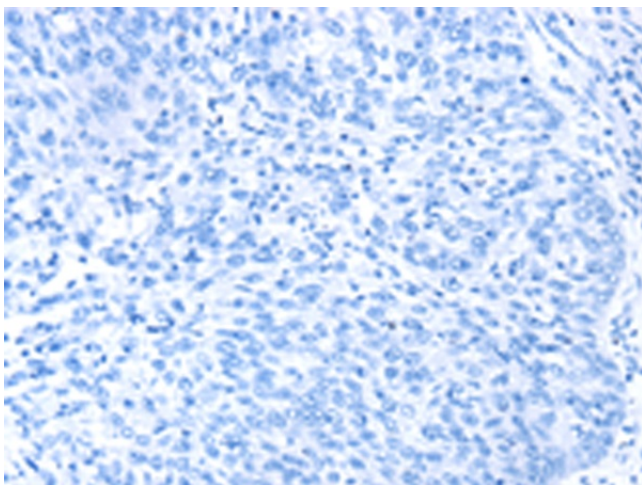
Immunohistochemistry of paraffin-embedded Human breast cancer tissue using TA350366 (ROBO3 Antibody) at dilution 1/35 (Original magnification: $\times 200$)



Immunohistochemistry of paraffin-embedded Human breast cancer tissue using TA350366 (ROBO3 Antibody) at dilution 1/35, treated with fusion protein. (Original magnification: ×200)



Immunohistochemistry of paraffin-embedded Human lung cancer tissue using TA350366 (ROBO3 Antibody) at dilution 1/35 (Original magnification: ×200)



Immunohistochemistry of paraffin-embedded Human lung cancer tissue using TA350366 (ROBO3 Antibody) at dilution 1/35, treated with fusion protein. (Original magnification: ×200)