

## ROBO3 RABBIT PAB

**Cat.#:** S217778

**Product Name:** Anti-ROBO3 Rabbit Polyclonal Antibody

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

**UNIPROT ID:** Q96MS0 (Gene Accession - BC008623 )

**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.

**Immunogen:** Fusion protein of human ROBO3

**Applications:** ELISA, IHC

**Recommended Dilutions:** IHC: 25-100; ELISA: 2000-5000

**Host Species:** Rabbit

**Clonality:** Rabbit Polyclonal

**Isotype:** Immunogen-specific rabbit IgG

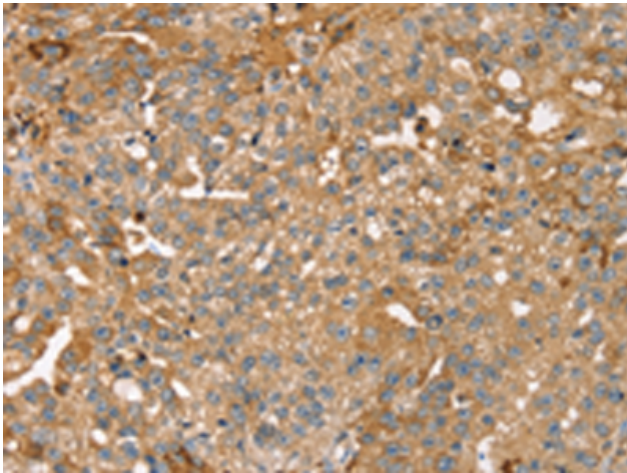
**Purification:** Antigen affinity purification

**Species Reactivity:** Human, Mouse

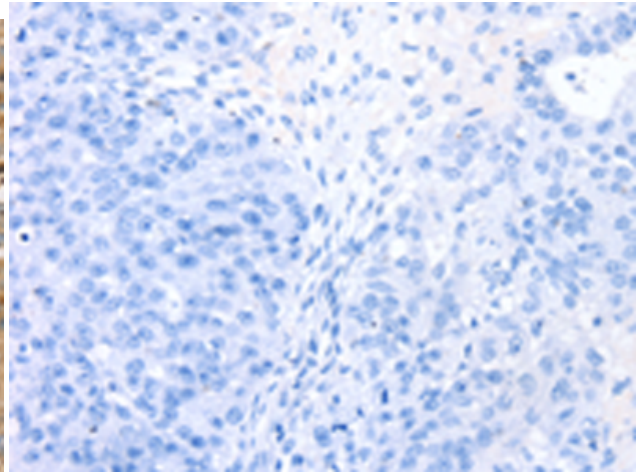
**Constituents:** PBS (without Mg<sup>2+</sup> and Ca<sup>2+</sup>), pH 7.4, 150 mM NaCl, 0.05% Sodium Azide and 40% glycerol

**Research Areas:** Cancer, Neuroscience

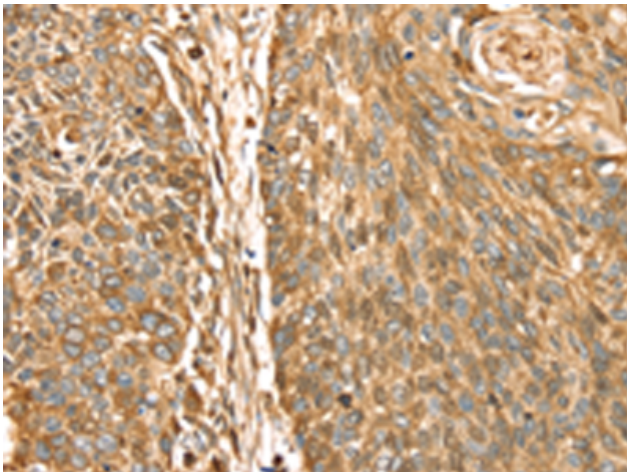
**Storage & Shipping:** Store at -20°C. Avoid repeated freezing and thawing



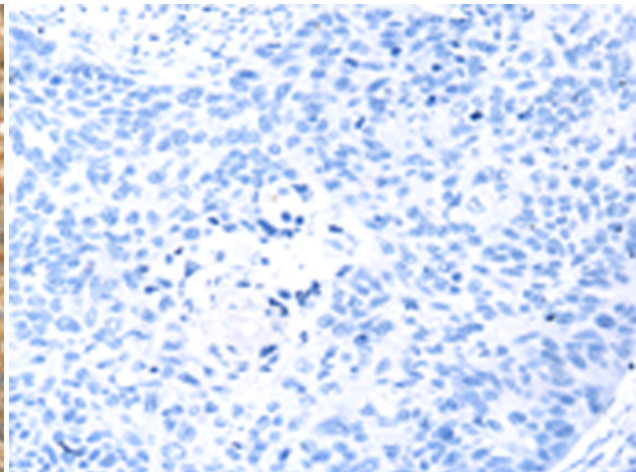
Immunohistochemistry analysis of paraffin embedded Human breast cancer tissue using 217778 (ROBO3 Antibody) at a dilution of 1/25 (Cytoplasm).



In comparison with the IHC on the left, the same paraffin-embedded Human breast cancer tissue is first treated with the fusion protein and then with 217778 (Anti-ROBO3 Antibody) at dilution 1/25.



The image on the left is immunohistochemistry of paraffin-embedded Human esophagus cancer tissue using 217778 (Anti-ROBO3 Antibody) at a dilution of 1/25.



In comparison with the IHC on the left, the same paraffin-embedded Human esophagus cancer tissue is first treated with fusion protein and then with D223051 (Anti-ROBO3 Antibody) at dilution 1/25.