

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human ROBO2 in direct ELISAs and Western blots. In direct ELISAs and Western blots, less than 2% cross-reactivity with recombinant rat ROBO1, recombinant human (rh) ROBO3 and rhROBO4 is observed.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	Mouse myeloma cell line NS0-derived recombinant human ROBO2 Ser22-Ala312, RPVA, Pro313-Pro859 Accession # Q9HCK4
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or as a 0.2 µm filtered solution in PBS.

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. *General Protocols* are available in the *Technical Information* section on our website.

	Recommended Concentration	Sample
Western Blot	0.1 µg/mL	Recombinant Human ROBO2 Fc Chimera (Catalog # 3147-RB)
Flow Cytometry	2.5 µg/10 ⁶ cells	NTera-2 human testicular embryonic carcinoma cell line differentiated with retinoic acid
Immunocytochemistry	5-15 µg/mL	Immersion fixed human neural progenitor cells differentiated by growth factor withdrawal
CyTOF-ready	Ready to be labeled using established conjugation methods. No BSA or other carrier proteins that could interfere with conjugation.	

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.2 mg/mL in sterile PBS.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none"> ● 12 months from date of receipt, -20 to -70 °C as supplied. ● 1 month, 2 to 8 °C under sterile conditions after reconstitution. ● 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

Human ROBO2 is a 175 kDa member of the ROBO/roundabout receptor family and is a 1357 amino acid (aa) type I transmembrane (TM) protein. It contains an extracellular domain (ECD) comprised of five C2-type Ig-like domains and three fibronectin type III domains. ROBO receptors interact with SLIT proteins to regulate axon guidance. Similar to ROBO1, the first two Ig-like domains of ROBO2 are predicted to be important for SLIT binding. Alternate splice forms of ROBO2 exist. The ROBO2 ECD in human shares 98% aa identity with the ROBO2 ECD in mouse and canine.