



## ***Biotinylated Anti-rat ROBO1 Antibody***

### **ORDERING INFORMATION**

**Catalog Number:** BAF1749

**Lot Number:** ZXI01

**Size:** 50 µg

**Formulation:** 0.2 µm filtered solution in PBS with BSA

**Storage:** -20° C

**Reconstitution:** sterile 0.1% BSA in TBS

**Specificity:** rat ROBO1

**Immunogen:** NS0-derived rrROBO1 (aa 19 - 560)

**Ig Type:** goat IgG

**Applications:** Western blot  
ELISA detection

### ***Preparation***

Produced in goats immunized with purified, NS0-derived, recombinant rat Roundabout homolog 1 (rrROBO1; aa 19 - 560). Rat ROBO1 specific IgG was purified by rat ROBO1 affinity chromatography and then biotinylated. ROBO1 is a type I transmembrane protein belonging to the ROBO family, which defines a novel subfamily of immunoglobulin superfamily proteins. ROBO family proteins are evolutionarily conserved receptors that interact with the secreted Slit proteins. ROBO-Slit interactions play an important role in axon guidance across the midline during central nervous system development. ROBO signaling also has a role in tumor angiogenesis and immune responses.

### ***Formulation***

Lyophilized from a 0.2 µm filtered solution in phosphate-buffered saline (PBS) containing 50 µg of bovine serum albumin (BSA) per 1 µg of antibody.

### ***Reconstitution***

Reconstitute with sterile Tris-buffered saline pH 7.3 (20 mM Trizma base, 150 mM NaCl) containing 0.1% BSA. If 1 mL of buffer is used, the antibody concentration will be 50 µg/mL.

### ***Storage***

Lyophilized samples are stable for twelve months from date of receipt when stored at -20° C to -70° C. Upon reconstitution, the antibody can be stored at 2° - 8° C for 1 month without detectable loss of activity. Reconstituted antibody can also be aliquotted and stored frozen at -20° C to -70° C **in a manual defrost freezer** for six months without detectable loss of activity. **Avoid repeated freeze-thaw cycles.**

### ***Specificity***

This antibody has been selected for use as a detection antibody in rat ROBO1 ELISAs and Western blots.

### ***Applications***

**Western blot** - This antibody can be used at 0.1 - 0.2 µg/mL with the appropriate secondary reagents to detect rat ROBO1. The detection limit for rrROBO1 is approximately 2 ng/lane under non-reducing and reducing conditions.

**ELISA detection** - This biotinylated antibody can be used as a detection reagent in a rat ROBO1 sandwich immunoassay in combination with the rat ROBO1 capture reagent (Cat. # MAB17491) and recombinant rat ROBO1 (Cat. # 1749-RB) as the standard. The suggested concentration range for this detection reagent is 0.1 - 0.4 µg/mL and should be titrated to determine the optimal concentration. A general protocol is provided at [www.RnDSystems.com/MAPELISA](http://www.RnDSystems.com/MAPELISA). In this format, less than 0.5% cross-reactivity is observed with rhROBO3 and rmROBO3.

**Optimal dilutions should be determined by each laboratory for each application.**

FOR RESEARCH USE ONLY. NOT FOR USE IN HUMANS.

**R&D Systems, Inc.**  
**1-800-343-7475**

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