Products for Wnt Research
### Wnt Signaling Pathways

Wnt ligands are a large family of secreted glycoproteins that have a central role in many processes involved in embryonic development and adult tissue homeostasis. The biological effects of Wnt ligands are mediated through an increasingly complex interplay of Wnt receptors, transmembrane regulators, and soluble inhibitors. The combination of these proteins is critical in determining whether a particular Wnt ligand will initiate β-Catenin-dependent or β-Catenin-independent signaling cascades. R&D Systems is globally recognized as providing the highest quality and largest selection of Wnt proteins on the market. This brochure highlights our breadth of Wnt-related reagents including difficult-to-isolate Wnt ligands, our selection of recently discovered transmembrane regulators of Wnt (RNF43, ZNRF3, LGR 4-6, and TROY), our range of Wnt-related antibodies, and Tocris small molecules that target the Wnt pathway.

**β-Catenin Dependent**

- Wnt
  - LRP-5/6 Antagonists
  - Wnt Antagonists

**β-Catenin Independent**

- R-Spondin
  - LGR 4-6, and TROY
  - Catenin Dependent
  - R-Spondin

### Proteins for Wnt Research

**Wnt Ligands: Most Extensive Offering!**

<table>
<thead>
<tr>
<th>Molecule</th>
<th>Species</th>
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**Regulators of Wnt Signaling: New and Emerging Proteins**

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<tr>
<th>Molecule</th>
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**Robust Binding Activity for Recombinant Human ZNRF3 and RNF43.**

**Learn more | rndsystems.com/pathways**

**Learn more | rndsystems.com/proteins**
Lgr4–6 Show Different R-Spondin Binding Preferences and Affinities

Use These Proteins in Your Research

Exclusively Available at R&D Systems!

Antibodies for Wnt Research

Lgr5/GPR49 Antibodies: Qualified by Application

R-Spondin Neutralizing Antibodies: Modulate Wnt Signaling

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Antibodies for Wnt Research

Lgr5/GPR49 Antibodies: Qualified by Application

R-Spondin Neutralizing Antibodies: Modulate Wnt Signaling
Detection of Human ROR1 by Flow Cytometry. MA-B 231 human breast cancer cell line was stained with Mouse Anti-Human ROR1 PE-conjugated Antibody (filled histogram; Catalog # IC003P) or PE-conjugated Mouse IgG2A Isotype Control Antibody (open; Catalog # IC108G).

Human Wnt Inhibitors

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| Full Wnt Family Product Listing |

**Antibodies for Wnt Research**

**ROR1 and ROR2: Now Detectable by Flow Cytometry!**

**Tocris Small Molecules for Wnt Signaling**

**Selectively Target Wnt Signaling Pathways**

**Wnt Ligands**

**Wnt Signaling Receptors**

**Wnt Modulators**

**Learn more | www.tocris.com/wntsignaling**
Where Science Intersects Innovation™