

**DESCRIPTION**

<b>Species Reactivity</b>	Human
<b>Specificity</b>	Detects human MIS RII in direct ELISAs and Western blots. In direct ELISAs and Western blots, approximately 10% cross-reactivity with recombinant rat MIS RII is observed, and less than 1% cross-reactivity with recombinant human TGF-β RI, RII, RIII, and RIIB is observed.
<b>Source</b>	Polyclonal Sheep IgG
<b>Purification</b>	Antigen Affinity-purified
<b>Immunogen</b>	Mouse myeloma cell line NS0-derived recombinant human MIS RII Pro18-Ser144 Accession # Q16671
<b>Formulation</b>	Lyophilized from a 0.2 μm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied as a 0.2 μm filtered solution in PBS.

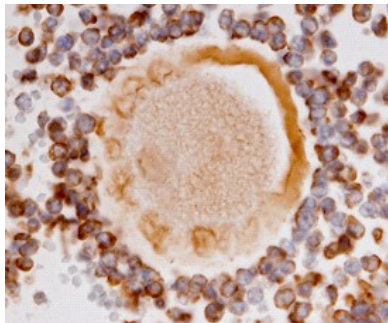
**APPLICATIONS**

**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.

	<b>Recommended Concentration</b>	<b>Sample</b>
<b>Western Blot</b>	0.1 μg/mL	Recombinant Human MIS RII Fc Chimera (Catalog # 4749-MR)
<b>Immunohistochemistry</b>	5-15 μg/mL	See Below
<b>Blockade of Receptor-ligand Interaction</b>	In a functional ELISA, 0.03-0.15 μg/mL of this antibody will block 50% of the binding of 100 ng/mL of Recombinant Human MIS RII Fc Chimera (Catalog # 4749-MR) to immobilized Recombinant Human MIS/AMH (Catalog # 1737-MS) coated at 2 μg/mL (100 μL/well). At 5 μg/mL, this antibody will block >90% of the binding.	

**DATA**

**Immunohistochemistry**



**MIS RII in Human Ovary.** MIS RII was detected in immersion fixed paraffin-embedded sections of human ovary using Sheep Anti-Human MIS RII Antigen Affinity-purified Polyclonal Antibody (Catalog # AF4749) at 10 μg/mL overnight at 4 °C. Before incubation with the primary antibody tissue was subjected to heat-induced epitope retrieval using Antigen Retrieval Reagent-Basic (Catalog # CTS013). Tissue was stained using the Anti-Sheep HRP-DAB Cell & Tissue Staining Kit (brown; Catalog # CTS019) and counter-stained with hematoxylin (blue). View our protocol for [Chromogenic IHC Staining of Paraffin-embedded Tissue Sections](#).

**PREPARATION AND STORAGE**

<b>Reconstitution</b>	Reconstitute at 0.2 mg/mL in sterile PBS.
<b>Shipping</b>	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
<b>Stability &amp; Storage</b>	<b>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</b> <ul style="list-style-type: none"> <li>• 12 months from date of receipt, -20 to -70 °C as supplied.</li> <li>• 1 month, 2 to 8 °C under sterile conditions after reconstitution.</li> <li>• 6 months, -20 to -70 °C under sterile conditions after reconstitution.</li> </ul>

**BACKGROUND**

Human MIS RII (Mullerian inhibiting substance type II receptor), also known as AMHRII (anti-Mullerian hormone type II receptor), is an 82 kDa serine/threonine receptor with a single transmembrane domain that belongs to the family of type II receptors of the TGF- $\beta$  superfamily (1). The MIS RII precursor is 573 amino acids in length, with a 17 amino acid (aa) signal sequence, a 127 aa extracellular region that also contains two potential N-linked glycosylation sites, a 26 aa transmembrane region, and a 403 aa cytoplasmic region that contains the serine/threonine kinase domain (1). Human MIS RII shares 82%, 78%, and 77% aa sequence identity with rabbit, mouse, and rat MIS RII, respectively. It is expressed in the mesenchyme surrounding the fetal Mullerian duct, in fetal and postnatal granulosa cells, and in Sertoli cells (1-6). MIS RII is a receptor for Mullerian inhibitor substance (MIS), also known as anti-Mullerian hormone (AMH), which is responsible for regression of the Mullerian duct, the anlagen of the uterus, Fallopian tubes, and upper vagina in male fetuses (1-6). Mutations in MIS RII result in persistent Mullerian duct syndrome (PMDS), an extremely rare form of pseudohermaphroditism (5, 6).

**References:**

1. Imbeaud, S. *et al.* (1995) *Nat. Genet.* **11**:382.
2. Baarends, W.M. *et al.* (1994) *Development* **120**:189.
3. di Clemente, N. *et al.* (1994) *Mol. Endocrinol.* **8**:1006.
4. Teixeira, J. *et al.* (1996) *Endocrinology* **137**:160.
5. Salhi, I *et al.* (2004) *Biochem. J.* **379**:785.
6. Imbeaud, S. *et al.* (1996) *Hum. Mol. Genet.* **5**:1269.