

Human MIS RII Biotinylated Antibody

Antigen Affinity-purified Polyclonal Sheep IgG Catalog Number: BAF4749

DESCRIPTION

Species Reactivity	Human		
Specificity Detects human MIS RII in Western blots. In Western blots, approximately 40% cross-reactivity with recombinant rat MIS less than 1% cross-reactivity with recombinant human TGF-β RI, RII, RII, and RIIB is observed.			
Source	Polyclonal Sheep IgG		
Purification	Antigen Affinity-purified		
Immunogen	Mouse myeloma cell line NS0-derived recombinant human MIS RII Pro18-Ser144 Accession # Q16671		
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with BSA as a carrier protein. See Certificate of Analysis for details.		

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 MIS RII Fc Chimera (Catalog # 4749-MR)	

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.	
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles.	
	 12 months from date of receipt, -20 to -70 °C as supplied. 	
	 1 month, 2 to 8 °C under sterile conditions after reconstitution. 	
	 6 months20 to -70 °C under sterile conditions after reconstitution. 	

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-β 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 of 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:

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- 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.

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