## Anti-Müllerian Hormone (AMH)

Method:	Enzyme Linked Immunosorbent Assay (ELISA)
Kit Manufacturer:	Ansh Labs, Webster, TX
Description:	<ul> <li>Anti-Müllerian hormone (AMH), a member of the TGFβ superfamily, is a homodimeric glycoprotein composed of two 55 kDa N-terminal and two 12.5 kDa C-terminal homodimers, non-covalently linked by disulfide bridges.</li> <li>AMH is secreted by the Sertoli cells in males. During embryonic development, AMH is responsible for Müllerian duct regression. AMH continues to be produced by the testes until puberty and then decreases slowly to residual post-puberty values. In females, AMH is produced by the granulosa cells of small growing follicles from the 36th week of gestation onwards until menopause when levels become undetectable. Potential clinical applications of low end anti-müllerian hormone (AMH) have been published in premature ovarian insufficiency, ovarian tumors, menopause and many more.</li> <li>The picoAMH ELISA is a quantitative three-step sandwich type immunoassay that is designed to measure human AMH. In principle, the AMH antibody-biotin conjugate binds to the solid phase antibody-antigen complex which in turn binds to the streptavidin-enzyme conjugate. The antibody-antigen-biotin conjugate-SHRP complex bound to the well is detected by enzyme-substrate reaction. The degree of enzymatic turnover of the substrate is determined by dual wavelength absorbance measurement at 450 nm as primary test filter and 630 nm as reference filter. The absorbance measured is directly proportional to the concentration of AMH in the samples and calibrators.</li> </ul>

## **Collection and Performance Characteristics**

Tube type:	Preferred: SST Alternate: Lithium heparin Plasma
Minimum Volume:	0.2 mL
Special Processing Considerations	Avoid assaying lipemic, hemolyzed or icteric samples. Avoid repeated freezing and thawing of samples. Thaw samples no more than 3 times. Patient age must be provided.
Lowest Reportable Value:	6.4 pg/mL
Dynamic range:	>40 years old: 7.8-2,000 pg/mL <40 years old: 39-10,000 pg/mL
Precision:	Intra-assay variation is 2.3 – 4.5% Inter-assay variation is 2.1 – 3.7 %