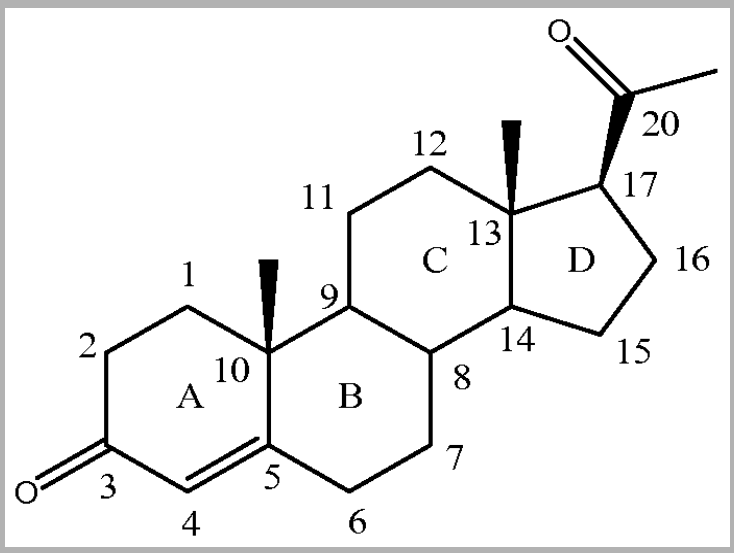
Monoclonal Antibodies to Progesterone

MAB234P and MAB235P, monoclonal antibodies to progesterone, are now ready for sampling.

The most accurate formats for measurement of progesterone in clinical samples are competition and/or inhibition assays since the molecule is only 314 daltons. Progesterone in a clinical sample competes with a carefully chosen conjugated progesterone reagent for available binding sites on a capture antibody specific for progesterone. The signal seen in a competitive immunoassay is inversely proportional to the amount of progesterone present in a sample.

Progesterone Molecular Structure and Numbering of Positions



MAB234P - Generated using progesterone-6-KLH immunogen

MAB235P - Generated using progesterone-11-KLH immunogen

A successful, specific clinical progesterone competition assay is dependent on the optimized pairing of a competition progesterone reagent with the anti-progesterone antibody. It is critical to understand the compatibility of the competition reagents used. Knowing the attachment point used in the chosen progesterone conjugate is important, as steric interactions can play a role in confounding an assay if the epitopes on the conjugate are blocked by the attached detection enzyme. The conjugation ratio used to develop the progesterone competition reagent can also have an effect on assay sensitivity and should be considered.

For the validation of MAB234P and MAB235P as capture antibodies, MBS used internally developed competition progesterone conjugates in a series of competitive ELISAs to look at antibody sensitivity and specificity. A limited supply of those progesterone conjugates are available for sampling with MAB234P and 235P while supplies last. MBS R&D assays demonstrated sensitivity levels within the normal clinical range for detection of progesterone.