

PRODUCT DATA SHEET

Product Data Sheet:	Sheep Monoclonal Antibodies (SMAs) to Estradiol (E2)
SMA Covered	E2.5A11, E2.6H9 & E2.2C7
Introduction and Production Description	The assay of estradiol is of interest in biological samples such as serum and oral fluid (saliva). The actual levels in clinical specimens can be very low (<20 pg/mL in the serum of post-menopausal women and children) and high affinity antibodies are useful in facilitating immunoassays capable of measuring such low levels.

Manufacturing Specification

Parameter	Specification	Test Method
Buffer and pH	PBS +0.1% Sodium azide at 7.2-7.4	pH Meter
Antibody Concentration	1-3 mg/mL	A280 (E _c = 1.4)
Purity and Aggregates	Single Main Peak ≥95%	Size Exclusion HPLC
Immunological Activity	±20% biological activity of frozen reference standard	In house ELISA

ELISA DATA: Conjugate Reactivity

	E2.5A11	E2.6H9	E2.2C7
E2-6-BSA	High	High	Low
E2-3-BSA	Medium	No binding	Low
E1-6-BSA	High	Low	Low
E3-6-BSA	High	Medium	Low

ELISA DATA: Free E2 Affinity and Estrogen Cross-Reactivities

	E2.5A11	E2.6H9	E2.2C7
E2 affinity (IC50%)	30 pg/mL	100 pg/mL	30 pg/mL
E1 cross-reactivity	10%	<1%	5%
E3 cross-reactivity	<1%	<1%	<1%

Note: - E1= estrone, E2= estradiol, E3= estriol