

PRODUCT DATA SHEET

Product Data Sheet:	Sheep Monoclonal Antibodies (SMAs) to Estriol (E3)
SMA Covered	E3.8A4 & E3.12G3
Introduction and Production Description	The assay of estriol is of interest in biological samples such as serum. During pregnancy estriol becomes the dominant estrogen and serum levels increase from 0.3 ng/mL to above 8.0 ng/mL. Its main use is in the diagnosis of foetal diseases. High affinity antibodies are useful in facilitating immunoassays capable of measuring such low levels. Assay designs are likely to benefit from the use of estradiol-6-X (ie E2) reagents or other non-estriol conjugates.

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

	E3.8A4	E3.12G3
E2-6-BSA	low	low

ELISA DATA: Free E3 Affinity and Estrogen Cross-Reactivities

	E3.8A4	E3.12G3
E3 affinity (IC₅₀%)	0.3 ng/mL	<1 ng/mL
E1 cross-reactivity	<0.1%	<0.1%
E2 cross-reactivity	<0.1%	<0.1%
E3-3-SO₄	<1%	<1%
E3-16-gluc	<1%	<1%
DHEA-S	<0.1%	<0.1%

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