

## PRODUCT DATA SHEET

<b>Product Data Sheet:</b>	Sheep Monoclonal Antibodies (SMAs) to <b>Buprenorphine (BUP)</b>
<b>SMA Covered</b>	<b>BUP.1C5, BUP.3G11 &amp; BUP.4B11</b>
<b>Introduction and Production Description</b>	The measurement of <b>buprenorphine</b> is of use in monitoring the controlled administration and the abuse of this drug. The levels in samples such as saliva can be very low and high affinity antibodies are of use in facilitating immunoassays that can measure low levels.

### Manufacturing Specification (both SMAs)

Parameter	Specification	Test Method
<b>Buffer and pH</b>	PBS +0.1% Sodium azide at 7.2-7.4	pH Meter
<b>Antibody Concentration</b>	1-3 mg/mL	A280 (E <sub>c</sub> = 1.4)
<b>Purity and Aggregates</b>	Single Main Peak ≥90%	Size Exclusion HPLC
<b>Immunological Activity</b>	±20% biological activity of frozen reference standard	In house ELISA

### ELISA DATA: Conjugate Reactivities and Affinities

	<b>BUP.1C5</b>	<b>BUP.3G11</b>	<b>BUP.4B11</b>
<b>BUP-3-O-BSA</b>	High	High	High

### ELISA DATA: Free BUP and Metabolite Affinities

	<b>BUP.1C5</b>	<b>BUP.3G11</b>	<b>BUP.4B11</b>
<b>BUP affinity (IC50%)</b>	50 ng/mL	30 ng/mL	50 ng/mL
<b>Nor-BUP (IC50%)</b>	50 ng/mL	30 ng/mL	300 ng/mL
<b>BUP-gluc' de (IC50%)</b>	50 ng/mL	30 ng/mL	>10 µg/mL
<b>n-BUP-gluc (IC50%)</b>	50 ng/mL	30 ng/mL	>10 µg/mL