

## Anti-6-MAM 12705 SPTN-5

### Product overview

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<b>Catalog number</b>	100983
<b>Specificity</b>	Antibody recognizes 6-Monoacetylmorphine (6-MAM)
<b>Description</b>	Monoclonal mouse antibody, cultured <i>in vitro</i> under conditions free from animal-derived components.
<b>Product buffer solution</b>	50 mM Na-citrate, pH 6.0, 0.9 % NaCl, 0.095 % NaN <sub>3</sub> as a preservative
<b>Shelf life and storage</b>	Unspecified, storage at 2–8 °C
<b>Subclass</b>	IgG <sub>1</sub>
<b>Analyte description</b>	Heroin (diacetylmorphine) is metabolized to 6-MAM and morphine. 6-MAM is a unique metabolite of heroin and its presence is definitive evidence of recent heroin use. Morphine is also a metabolite of several legal drugs, including codeine, and therefore is not a conclusive indication of heroin use.

### Parameters tested on each lot

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<b>Product appearance</b>	Liquid, may turn slightly opaque during storage.
<b>Product concentration</b>	5.0 mg/ml (+/-10 %)
<b>Immunoreactivity</b>	80–120 % compared to the reference sample in an FIA test
<b>IEF Profile</b>	6.5–7.1
<b>Purity</b>	≥ 95 %

### Kinetic parameters

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<b>Association rate constant</b>	$6.7 \times 10^5$ 1/Ms
<b>Dissociation rate constant</b>	$3.1 \times 10^{-5}$ 1/s
<b>Affinity constant</b>	$K_A = 2.2 \times 10^{10}$ 1/M; $K_D = 9.6 \times 10^{-11}$ M (= 0.096 nM)
<b>Determination method</b>	BLI (Octet RED96e)
<b>Determination antigen</b>	6-Monoacetylmorphine (6-MAM)-BSA Antigen, Medix Biochemica (Cat 170031)



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<b>Cross-reactivities</b>	Morphine $\leq$ 0.03 %												
<b>Epitope</b>	Not determined												
<b>Pair recommendations</b>	6-Monoacetylmorphine (6-MAM)-BSA Antigen, Medix Biochemica (Cat 170031)  Please note that pair recommendations are based on results obtained by our laboratory. Equally good results may be obtained using other pairs and therefore these recommendations are only indicative.												
<b>Platforms tested</b>	FIA LF												
<b>Antigens tested</b>	Please, see pair recommendation above.												
<b>Product stability</b>	<table><thead><tr><th>TEMPERATURE, TIME</th><th>RESULT</th></tr></thead><tbody><tr><td>-70 °C, 21 days</td><td>OK</td></tr><tr><td>-20 °C, 21 days</td><td>OK</td></tr><tr><td>+4 °C, 21 days</td><td>OK</td></tr><tr><td>+35 °C, 21 days</td><td>OK</td></tr><tr><td>+45 °C, 7 days</td><td>OK</td></tr></tbody></table> Stability testing is performed in the product buffer to see whether different temperatures affect the antigen binding, charge or composition of the antibody. Please note that the shelf life given on the first page is based on real time stability testing at 2–8 °C in the product buffer.	TEMPERATURE, TIME	RESULT	-70 °C, 21 days	OK	-20 °C, 21 days	OK	+4 °C, 21 days	OK	+35 °C, 21 days	OK	+45 °C, 7 days	OK
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<b>Miscellaneous</b>	-												
<b>References</b>	-												



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