

## ***Life Diagnostics, Inc.***

### ***mPEG Monoclonal Clone 5D6-3***

Catalog No.	5D6-3
Description	Mouse monoclonal anti-PEG (IgG1k)
KD	< 1 x 10 <sup>-10</sup> M (Determined using an Octet QK™ in a buffer of 150 mM NaCl, 10 mM Tris.Cl, 1 mM EDTA, 0.1% NaN <sub>3</sub> , 7% w/v BSA, pH 7.4 using 2 kDa mPEG-biotin as ligand)
Purity	90% by SDS PAGE
Protein	~ 1 mg/ml (E1% at 280 nm = 14.0)
Applications	ELISA, Western Blot
Buffer	10 mM Sodium Phosphate, 150 mM NaCl, pH 7.2, 0.09% NaN <sub>3</sub>
Storage	2-8°C
Immunogen	mPEG-KLH

Comments: This antibody recognizes the terminal methoxy group of methoxy-PEG. It does not recognize the polyoxyethylene "backbone" or PEG chains that lack the terminal methoxy group. We purify the antibody using a method that do not involve low pH elution from protein G or A. This gives a slightly lower purity product but the active antibody content is increased by ~3-fold. This antibody pairs well with our anti-PEG monoclonal 9B5-6-25-7 in ELISA. It was developed and manufactured at Life Diagnostics, Inc.

## ***Life Diagnostics, Inc.***

### ***mPEG Monoclonal Clone 5H4-2***

Catalog No.	5H4-2
Description	Mouse monoclonal anti-PEG (IgG1k)
KD	< 1 x 10 <sup>-10</sup> M (Determined using an Octet QK™ in a buffer of 150 mM NaCl, 10 mM Tris.Cl, 1 mM EDTA, 0.1% NaN <sub>3</sub> , 7% w/v BSA, pH 7.4 using 2 kDa mPEG-biotin as ligand)
Purity	90% by SDS PAGE
Protein	~1 mg/ml (E1% at 280 nm = 14.0)
Applications	ELISA, Western Blot
Buffer	10 mM Sodium Phosphate, 150 mM NaCl, pH 7.2, 0.09% NaN <sub>3</sub>
Storage	2-8°C
Immunogen	mPEG-KLH

Comments: This antibody recognizes the terminal methoxy group of methoxy-PEG. It does not recognize the polyoxyethylene "backbone" or PEG chains that lack the terminal methoxy group. We purify the antibody using a method that do not involve low pH elution from protein G or A. This gives a slightly lower purity product but the active antibody content is increased by ~3-fold. This antibody pairs well with our anti-PEG monoclonal 9B5-6-25-7 in ELISA. It was developed and manufactured at Life Diagnostics, Inc.

## ***Life Diagnostics, Inc.***

### ***Polyethylene Glycol (PEG) Monoclonal Clone 1D9-6***

Catalog No.	1D9-6
Description	Mouse anti-PEG IgG1k Purified by Protein-G affinity chromatography from serum-free culture medium
KD	2.9x 10 <sup>-9</sup> M (Determined using an Octet QK™ in a buffer of 1M NaCl, 5 mM Tris.Cl, pH 7.4, 0.1% NaN <sub>3</sub> , 7% w/v BSA, using biotin-20 kDa mPEG as ligand)
Purity	>95% by SDS PAGE
Protein	0.5 - 5 mg/ml (E1% at 280 nm = 14.0)
Applications	Indirect ELISA, Western Blot
Buffer	10 mM Sodium Phosphate, 150 mM NaCl, pH 7.2, 0.10% NaN <sub>3</sub>
Storage	2-8°C
Immunogen	mPEG-Ovalbumin

Comments: This antibody recognizes the PEG polymer chain, not the terminal methoxy group. It will recognize both methoxy-PEG and non methoxy-PEG. It recognizes PEG's with a molecular weight of 550 or greater in indirect ELISA.

## ***Life Diagnostics, Inc.***

### ***Polyethylene Glycol (PEG) Monoclonal Clone 9B5-6-25-7***

Catalog No.	9B5-6-25-7
Description	Mouse anti-PEG IgG1k Purified by Protein-G affinity chromatography from serum-free culture medium
KD	1.8 x 10 <sup>-9</sup> M (Determined using an Octet QK™ in a buffer of 1M NaCl, 5 mM Tris.Cl, pH 7.4, 0.1% NaN <sub>3</sub> , 7% w/v BSA, using biotin-20 kDa mPEG as ligand)
Purity	>95% by SDS PAGE
Protein	0.5 - 5 mg/ml (E1% at 280 nm = 14.0)
Applications	Indirect ELISA, Western Blot
Buffer	10 mM Sodium Phosphate, 150 mM NaCl, pH 7.2, 0.10% NaN <sub>3</sub>
Storage	2-8°C
Immunogen	mPEG-Ovalbumin

Comments: This antibody recognizes the PEG polymer chain, not the terminal methoxy group. It will recognize both methoxy-PEG and non methoxy-PEG. It recognizes PEG's with a molecular weight of 550 or greater in indirect ELISA. Buffers containing zwitterionic detergents such as CHAPS (including our buffers PEGD50-1 and PEGW50-20) interfere with binding of 9B5-6-25-7 to PEG and PEGylated proteins. We recommend using TBS buffer, pH 7.4.

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## ***Life Diagnostics, Inc.***

### ***Polyethylene Glycol (PEG) Monoclonal Clone 3F12-1***

Catalog No.	3F12-1
Description	Mouse anti-PEG IgG1k Purified by Protein-G affinity chromatography from serum-free culture medium
KD	1.84 x 10 <sup>-8</sup> M (Determined using an Octet QK™ in a buffer of 1M NaCl, 5 mM Tris.Cl, pH 7.4, 0.1% NaN <sub>3</sub> , 7% w/v BSA, using biotin-20 kDa mPEG as ligand)
Purity	>95% by SDS PAGE
Protein	1 - 5 mg/ml (E1% at 280 nm = 14.0)
Applications	Indirect & Sandwich ELISA, Western Blot
Buffer	10 mM Sodium Phosphate, 150 mM NaCl, pH 7.2, 0.10% NaN <sub>3</sub>
Storage	2-8°C
Immunogen	mPEG-Ovalbumin

Comments: This antibody recognizes the PEG polymer chain, not the terminal methoxy group. It will recognize both methoxy-PEG and non-methoxy PEG. It recognizes PEG's with a molecular weight of 550 or greater in indirect ELISA. Studies at LDI indicate it can be used in indirect ELISA and as a coating antibody in sandwich ELISA.

## ***Life Diagnostics, Inc.***

### ***Polyethylene Glycol (PEG) Monoclonal Clone 10B4-2***

Catalog No.	10B4-2
Description	Mouse anti-PEG IgG1k Purified by Protein-G affinity chromatography from serum-free culture medium
KD	2.28 x 10 <sup>-8</sup> M (Determined using an Octet QK™ in a buffer of 1M NaCl, 5 mM Tris.Cl, pH 7.4, 0.1% NaN <sub>3</sub> , 7% w/v BSA, using biotin-20 kDa mPEG as ligand)
Purity	>95% by SDS PAGE
Protein	1 - 5 mg/ml (E1% at 280 nm = 14.0)
Applications	Direct, indirect & sandwich ELISA, Western Blot
Buffer	10 mM Sodium Phosphate, 150 mM NaCl, pH 7.2, 0.10% NaN <sub>3</sub>
Storage	2-8°C
Immunogen	mPEG-Ovalbumin

Comments: This antibody recognizes the PEG polymer chain, not the terminal methoxy group. It will recognize both methoxy-PEG and non-methoxy PEG. It recognizes PEG's with a molecular weight of 550 or greater in direct ELISA. Studies at LDI indicate it can be used in indirect ELISA and as conjugate antibody in sandwich ELISA. It can be coupled to alkaline phosphatase using glutaraldehyde and pairs with monoclonals 3F12-1 and 10E3-1-4 as coating antibodies.

## ***Life Diagnostics, Inc.***

### ***Polyethylene Glycol (PEG) Monoclonal Clone 10E3-1-4***

Catalog No.	10E3-1-4
Description	Mouse anti-PEG IgG1k Purified by Protein-G affinity chromatography from serum-free culture medium
KD	3.7 x 10 <sup>-8</sup> M (Determined using an Octet QK™ in a buffer of 1M NaCl, 5 mM Tris.Cl, pH 7.4, 0.1% NaN <sub>3</sub> , 7% w/v BSA, using biotin-20 kDa mPEG as ligand)
Purity	>95% by SDS PAGE
Protein	1 - 5 mg/ml (E1% at 280 nm = 14.0)
Applications	Direct & Sandwich ELISA, Western Blot
Buffer	10 mM Sodium Phosphate, 150 mM NaCl, pH 7.2, 0.10% NaN <sub>3</sub>
Storage	2-8°C
Immunogen	mPEG-Ovalbumin

Comments: This antibody recognizes the PEG polymer chain, not the terminal methoxy group. It will recognize both methoxy-PEG and non-methoxy PEG. It recognizes PEG's with a molecular weight of 550 or greater in indirect ELISA. Studies at LDI indicate it can be used as coating antibody in sandwich ELISA when paired with monoclonal 10B4-2 as detection antibody.

## ***Life Diagnostics, Inc.***

### ***Rabbit Anti-Polyethylene Glycol (PEG)***

Catalog No.	PEGPAB-01
Description	Rabbit anti-PEG IgG. Purified by affinity chromatography on non-methoxy PEG agarose and ion-exchange chromatography.
Purity	>90% by SDS PAGE
Protein	0.5 - 5 mg/ml (E1% at 280 nm = 14.0)
Applications	ELISA, Western Blot
Buffer	10 mM Sodium Phosphate, 150 mM NaCl, pH 7.2, 0.10% NaN <sub>3</sub>
Storage	2-8°C short term, -20°C or lower long term (avoid repeated freeze-thaws)
Immunogen	mPEGylated ovalbumin

Comments: This antibody recognizes the PEG polymer chain, not the terminal methoxy group. It will recognize both methoxy-PEG and non methoxy-PEG. It recognizes PEG's with a molecular weight of 550 or greater in direct ELISA and western blot assays. Studies at LDI indicate that it pairs well, as a detection antibody, when used with monoclonals 3F12-1 and 10E3-1-4 as coating antibodies. It can be efficiently conjugated to alkaline phosphatase using glutaraldehyde.



## ***Life Diagnostics, Inc.***

### ***Anti-PEG Agarose***

Catalog No.	9B5-AG
Description	Anti-PEG monoclonal antibody (9B5-6-25-7) coupled to agarose, ~0.6 mg/ml
Applications	Affinity purification of PEGylated proteins
Buffer	10 mM Sodium Phosphate, 150 mM NaCl, 0.09% NaN <sub>3</sub> , pH 7.2
Storage	-2-8°C. DO NOT FREEZE

9B5 Anti-PEG agarose is prepared by irreversibly coupling monoclonal antibody 9B5-6-25-7 to agarose via its FC region. This ensures that the PEG binding sites of the coupled antibody retain functionality. Approximately 0.6 mg of antibody is coupled per ml of settled agarose.

## *Life Diagnostics, Inc.*

### *Multi-PEGylated BSA* (PEGylated with 20kDa mPEG-SVA)

Catalog No.	PBSA-00
Concentration	1-5 mg/ml (Assuming an absorbance of 0.632 at 280 nm for a 1 mg/ml solution).  <b>Please note:</b> The concentration above refers only to the BSA polypeptide concentration. It does not include the mass contributed by the 20 kDa mPEG chains
Buffer	150 mM NaCl, 10 sodium phosphate, 0.09% NaN <sub>3</sub> , (pH 7.2)
Storage	2-8°C short term, -20 to -80°C long term
Comments	Prepared by reaction of 20 kDa mPEG succinimidyl valerate (mPEG-SVA) with BSA. A 5 fold weight excess of mPEG-SVA was used (17-fold molar excess). Free-PEG was removed by gel-filtration.

## ***Life Diagnostics, Inc.***

### ***Mono PEGylated BSA*** ***(PEGylated with 20kDa mPEG maleimide)***

Catalog No.	PBSA-01
Analysis	SDS PAGE & HPLC
Purity	≥90%
Concentration	100 - 500 µg/ml (Assuming an extinction coefficient of 0.632 at 280 nm for a 1 mg/ml solution and path length of 1 cm).
Buffer	150 mM NaCl, 10 sodium phosphate, 0.1% NaN <sub>3</sub> , (pH 7.2)
Storage	-20°C (Safe for shipping at 2-8°C)
Comments	<p>Prepared by conjugation of mPEG-maleimide (20 kDa) to native BSA followed by gel-filtration chromatography to remove free PEG and unconjugated BSA.</p> <p>BSA contains a single maleimide-reactive thiol at Cys-34. Reaction of BSA with mPEG-maleimide therefore results in the covalent attachment a single PEG molecule per molecule of BSA.</p>

## ***Life Diagnostics, Inc.***

### ***Mono PEGylated BSA*** ***(PEGylated with 20kDa pentanoic acid-PEG maleimide)***

Catalog No.	PBSA-01P
Analysis	SDS PAGE & HPLC
Purity	≥90%
Concentration	1 - 10 mg/ml
Buffer	150 mM NaCl, 10 sodium phosphate, 0.1% NaN <sub>3</sub> , (pH 7.2)
Storage	-80°C
Comments	Prepared by conjugation of pentanoic acid-PEG-maleimide (20 kDa) to native BSA followed by gel-filtration chromatography to remove free PEG and unconjugated BSA.

## ***Life Diagnostics, Inc.***

### ***Mono PEGylated BSA*** ***(PEGylated with 5 kDa mPEG maleimide)***

Catalog No.	PBSA-02
Analysis	SDS PAGE & HPLC
Purity	≥90%
Concentration	200 - 1000 µg/ml (Assuming an extinction coefficient of 0.632 at 280 nm for a 1 mg/ml solution and path length of 1 cm).
Buffer	150 mM NaCl, 10 sodium phosphate, 0.1% NaN <sub>3</sub> , (pH 7.2)
Storage	-20°C (Safe for shipping at 2-8°C)
Comments	<p>Prepared by conjugation of mPEG-maleimide (5 kDa) to native BSA followed by gel-filtration chromatography to remove free PEG and unconjugated BSA.</p> <p>BSA contains a single maleimide-reactive thiol at Cys-34. Reaction of BSA with mPEG-maleimide therefore results in the covalent attachment a single PEG molecule per molecule of BSA.</p>

## ***Life Diagnostics, Inc.***

### ***Multi-PEGylated KLH*** ***(PEGylated with 20kDa mPEG-SVA)***

Catalog No.	PKLH-01
Concentration	1 - 5 mg/ml (Assuming an absorbance of 0.295 at 345 nm for a 1 mg/ml solution).  <b>Please note:</b> The concentration above refers only to the KLH polypeptide concentration. It does not include the mass contributed by the 20 kDa mPEG chains
Buffer	150 mM NaCl, 10 sodium phosphate, 0.09% NaN <sub>3</sub> , (pH 7.2)
Storage	2-8°C short term, -20 to -80°C long term
Comments	Prepared by reaction of 20 kDa mPEG succinimidyl valerate (mPEG-SVA) with purified KLH. A 6.5 fold weight excess of mPEG-SVA was used (~120-fold molar excess assuming a subunit mwt. of 370 kDa for KLH). Free-PEG was removed by gel-filtration.