

Anti-Influenza B 9909 SPTN-5

Product overview

Catalog number	100473
Specificity	Antibody recognizes <i>Influenza B</i> nucleoprotein (np)
Description	Monoclonal mouse antibody, cultured <i>in vitro</i> under conditions free from animal-derived components.
Product buffer solution	50 mM Na-citrate, pH 6.0, 0.9 % NaCl, 0.095 % NaN ₃ as a preservative
Shelf life and storage	36 months from manufacturing at 2–8 °C
Subclass	IgG _{2b}
Analyte description	Influenza B virus is the only species in a genus in the virus family Orthomyxoviridae. Influenza B viruses are only known to infect humans and seals. This limited host range is apparently responsible for the lack of Influenza B caused influenza pandemics in contrast with those caused by the morphologically similar Influenza A. In addition, Influenza B mutates at a rate 2-3 times lower than type A. However, influenza B mutates enough that lasting immunity is not possible.

Parameters tested on each lot

Product appearance	Liquid, may turn slightly opaque during storage
Product concentration	5.0 mg/ml (+/- 10 %)
Immunoreactivity	80–120 % compared to the reference sample in an FIA test
IEF Profile	6.7–8.9
Purity	≥ 95 %

Kinetic parameters

Association rate constant	2.1×10^5 1/Ms
Dissociation rate constant	1.2×10^{-3} 1/s
Affinity constant	$K_A = 1.8 \times 10^8$ 1/M; $K_D = 5.7 \times 10^{-9}$ M (=5.7 nM)
Determination method	SPR analysis (ProteOn XPR36)
Determination antigen	Recombinant Influenza B virus nucleoprotein from strain B/Singapore/222/79 (in-house antigen, UniProtKB P04666)



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Cross-reactivities	Recognizes Influenza B/Yamagata clade 3, Influenza B/Victoria clade 1A, clade 1A ($\Delta 2$), and clade 1A ($\Delta 3$). Does not recognize Influenza A (H3N2) group 3C.2a1b and group 3C.3a, Influenza A (H1N1)pdm09 group 6B.1A1 and group 6B.1A5.												
Epitope	Not determined (N/D)												
Pair recommendations	As nucleoprotein is abundant in the virus, all Anti-Influenza B antibodies (9901, 9906, and 9909) pair with themselves and each other.												
Platforms tested	FIA												
Antigens tested	Recombinant Influenza B NP antigen, Medix Biochemica 610051												
Product stability	<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, 3 days</td><td>Reduced immunoreactivity</td></tr></tbody></table> <p>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.</p>	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, 3 days	Reduced immunoreactivity
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Miscellaneous	-												
References	-												



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