

Anti-Influenza A 7305 SPRN-5

Product overview

Catalog number	100082
Specificity	Antibody recognizes <i>Influenza A</i> nucleoprotein (np)
Description	Monoclonal mouse antibody, cultured <i>in vitro</i> under conditions free from animal-derived components.
Product buffer solution	37 mM citrate, 125mM phosphate, pH 6.0, 0.9 % NaCl, 0.095 % NaN ₃ as a preservative
Shelf life and storage	24 months from manufacturing at 2–8 °C
Subclass	IgG _{2a}
Analyte description	Influenza A is a genus of the Orthomyxoviridae family of viruses and includes only one species which causes influenza in birds and some mammals. There are several subtypes, labeled according to an H number (for the type of hemagglutinin) and an N number (for the type of neuraminidase). There are 16 different H antigens (H1 to H16) and nine different N antigens (N1 to N9). Each virus subtype has mutated into a variety of strains with differing pathogenic profiles; some pathogenic to one species but not others, some pathogenic to multiple species.

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	6.6–7.5
Purity	≥ 95 %

Kinetic parameters

Association rate constant	4.1×10^4 1/Ms
Dissociation rate constant	7.7×10^{-4} 1/s
Affinity constant	$K_A = 5.3 \times 10^7$ 1/M; $K_D = 1.9 \times 10^{-8}$ M (= 19 nM)
Determination method	SPR analysis (ProteOn XPR36)
Determination antigen	Recombinant Influenza A virus nucleoprotein (in-house antigen)



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Cross-reactivities

Recognizes Influenza A (H3N2) group 3C.2a1b and group 3C.3a, Influenza A (H1N1)pdm09 group 6B.1A1 and group 6B.1A5. Antibody also recognizes H5N3, H7N3, H9N2, and H5N1.

Does not recognize Influenza B/ Yamagata clade 3, Victoria clade 1A, clade 1A(Δ 2), clade 1A(Δ 3); Coxsackie -virus types: A9, A13, A18, A21, B1, B2, B3, B4, B5; Echo-virus types: 1, 6, 7, 9, 11, 30; Enterovirus-70
S. sanguis, *S. mutans*, *S. mitis*, *B. fragilis*, *H. influenzae*, *S. pneumoniae*, *M. catarrhalis*, *N. meningitides*, *S. agalactiae*, *E. faecalis*, *S. epidermidis*, *K. pneumoniae*, *K. monocytogenes*, *S. pyogenes*, *S. aureus*, *P. aeruginosa*, *P. vulgaris*, *E. coli*, *B. pertussis*, *C. albicans*, *N. gonorrhoeae*, β -hemolytic streptococcus group C, β -hemolytic streptococcus group F, β -hemolytic streptococcus group G

Non-immunological reactivity with *S. aureus*, HSV-1 and *Streptococcus* group A

Epitope

Not Determined (N/D)

Pair recommendations

		DETECTION		
		7304	7305	7307
CAPTURE	7304	-	+	-
	7305	+	-	+
	7307	-	+	-

The pair recommendations are based on antibodies binding to different epitopes. As nucleoprotein is abundant in the virus, all antibodies pair with themselves and each other.

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.

Platforms tested

FIA

Antigens tested

Recombinant Influenza A NP antigen, Medix Biochemica 610050

Product stability

TEMPERATURE, TIME	RESULT
-70 °C, 21 days	N/D
-20 °C, 21 days	OK
+4 °C, 21 days	OK
+25 °C, 21 days	OK
+35 °C, 21 days	OK
+45 °C, 7 days	OK

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.

Miscellaneous

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References

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