

Peptide Array, *Yersinia pestis* F1 Capsule Antigen
Catalog No. NR-2866

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Product Description: The 27-peptide array spans the F1 capsule antigen of the gram-negative bacterium *Yersinia pestis* (GenPept: NP_395430). Peptides are 14- to 17-mers, with 11 amino acid overlaps.

Lot: N418-1 to 27

The following information applies to all peptides:

- Appearance
- Mass spectral analysis
- Counter Ion

White lyophilized powder
 Correct MW by MALDI-TOF
 Trifluoroacetate

Peptide-specific information is shown in the two tables below.

Table 1							
Peptide	Date of Mfg.	Length	Sequence	Molecular Weight (amu)	Hydrophilicity	Purity by HPLC ^a	Peptide Content ^b
1 of 27	5/23/2006	17	1 MKKISSVIAIALFGTIA 17	1763.23	1.51	81.5%	83.8%
2 of 27	5/23/2006	17	7 VIAIALFGTIATANAAD 23	1631.90	1.55	88.0%	87.7%
3 of 27	5/23/2006	17	13 FGTIATANAADLTASTT 29	1625.77	0.49	84.1%	87.7%
4 of 27	5/23/2006	17	19 ANAADLTASTTATATLV 35	1591.75	0.66	86.6%	87.5%
5 of 27	5/23/2006	17	25 TASTTATATLVEPARIT 41	1703.92	0.3	99.2%	88.2%
6 of 27	5/23/2006	17	31 TATLVEPARITLTYKEG 47	1863.16	-0.09	94.6%	84.5%
7 of 27	5/23/2006	17	37 PARITLTYKEGAPITIM 53	1875.28	0.23	98.7%	84.6%
8 of 27	5/23/2006	17	43 TYKEGAPITIMDNGNID 59	1852.07	-0.55	82.4%	89.0%
9 of 27	5/23/2006	17	49 PITIMDNGNIDTELLVG 65	1815.09	0.35	83.6%	88.8%
10 of 27	5/23/2006	17	55 NGNIDTELLVGTTLGG 71	1686.89	0.36	97.6%	88.1%
11 of 27	5/23/2006	17	61 ELLVGTTLGGYKTGTT 77	1724.00	0.33	99.1%	88.3%
12 of 27	5/23/2006	17	67 LTLGGYKTGTTSTSVNF 83	1746.95	-0.02	89.1%	88.5%
13 of 27	5/23/2006	17	73 KTGTTSTSVNFTDAAGD 89	1672.74	-0.57	88.0%	88.0%
14 of 27	5/23/2006	17	79 TSVNFTDAAGDPMYLF 95	1850.05	0.14	97.7%	89.0%
15 of 27	5/23/2006	17	85 DAAGDPMYLFSTSQDGN 101	1802.91	-0.66	85.1%	88.8%
16 of 27	5/23/2006	17	91 MYLFTSQDGNNHQFTT 107	2005.17	-0.86	98.6%	89.8%
17 of 27	5/23/2006	17	97 SQDGNNHQFTTKVIGKD 113	1889.03	-1.38	87.1%	80.6%
18 of 27	5/23/2006	17	103 HQFTTKVIGKDSRDFDI 119	2007.25	-0.78	90.5%	77.9%
19 of 27	5/23/2006	17	109 VIGKDSRDFDISPKVNG 125	1847.07	-0.59	88.6%	80.2%
20 of 27	5/23/2006	17	115 RFDISPKVNGENLVGD 131	1875.04	-0.77	91.2%	84.6%
21 of 27	5/23/2006	17	121 PKVNGENLVGDDVVLAT 137	1739.96	0.1	99.3%	88.4%
22 of 27	5/23/2006	17	127 NLVGDDVVLATGSQDFF 143	1796.97	0.46	89.2%	88.7%
23 of 27	5/23/2006	17	133 VVLATGSQDFFVRSIGS 149	1783.03	0.76	89.0%	88.7%
24 of 27	5/23/2006	17	139 SQDFFVRSIGSKGGKLA 155	1797.06	-0.18	91.9%	79.8%
25 of 27	5/23/2006	17	145 RSIGSKGGKLAAGKYTD 161	1708.95	-0.76	93.1%	75.0%
26 of 27	5/23/2006	17	151 GGKLAAGKYTDAVTVTV 167	1650.91	0.35	99.9%	82.8%
27 of 27	5/23/2006	14	157 GKYTDAVTVTVSNQ 170	1482.62	-0.33	90.4%	86.7%

^a% full-length
^bRemainder is salt and water

Table 2 - Amino Acid Analysis

Peptide		Ala (A)	Arg (R)	Asx (N,D)	Cys (C)	Glx (Q,E)	Gly (G)	His (H)	Ile (I)	Leu (L)	Lys (K)	Met (M)	Phe (F)	Pro (P)	Ser (S)	Thr (T)	Trp (W)	Tyr (Y)	Val (V)
1 of 27	Expected	3.00					1.00		4.00	1.00	2.00	1.00	1.00		2.00	1.00			1.00
	Actual	2.90					1.09		2.39 ^a	0.98	1.79	1.01	1.00		1.76	0.88			0.59 ^a
2 of 27	Expected	6.00		2.00			1.00		3.00	1.00			1.00			2.00			1.00
	Actual	5.80		2.08			0.99		1.45 ^a	1.06			1.00			1.72			0.52 ^a
3 of 27	Expected	5.00		2.00			1.00		1.00	1.00			1.00		1.00	5.00			
	Actual	4.91		1.88			1.00		0.90	1.00			1.03		0.92	4.71			
4 of 27	Expected	6.00		2.00						2.00					1.00	5.00			1.00
	Actual	5.72		1.80						2.00					1.00	4.64			1.18
5 of 27	Expected	4.00	1.00			1.00			1.00	1.00				1.00	1.00	6.00			1.00
	Actual	3.76	1.06			0.87			1.00	1.07				1.04	0.95	5.75			1.03
6 of 27	Expected	2.00	1.00			2.00	1.00		1.00	2.00	1.00			1.00		4.00		1.00	1.00
	Actual	1.87	1.05			1.74	1.05		1.00	1.90	0.93			1.04		3.61		1.12	1.03
7 of 27	Expected	2.00	1.00			1.00	1.00		3.00	1.00	1.00	1.00		2.00		3.00		1.00	
	Actual	1.86	1.09			0.96	1.01		2.94	1.07	0.98	0.90		1.97		2.76		1.00	
8 of 27	Expected	1.00		4.00		1.00	2.00		3.00		1.00	1.00		1.00		2.00		1.00	
	Actual	1.05		3.77		1.02	2.24		3.02		1.00	1.02		1.13		1.82		1.18	
9 of 27	Expected			4.00		1.00	2.00		3.00	2.00		1.00		1.00		2.00			1.00
	Actual			3.77		0.95	2.14		2.95	2.00		0.81		1.17		1.85			1.05
10 of 27	Expected			3.00		1.00	4.00		1.00	4.00						3.00			1.00
	Actual			2.96		1.12	3.82		1.00	3.81						2.73			1.07
11 of 27	Expected					1.00	4.00			4.00	1.00					5.00		1.00	1.00
	Actual					0.89	3.98			3.61	1.00					4.68		1.13	0.99
12 of 27	Expected			1.00			3.00			2.00	1.00		1.00		2.00	5.00		1.00	1.00
	Actual			0.84			2.88			1.92	0.86		1.00		1.77	4.59		1.03	0.95
13 of 27	Expected	2.00		3.00			2.00				1.00		1.00		2.00	5.00			1.00
	Actual	1.89		2.90			1.88				0.90		1.06		1.72	4.76			1.00
14 of 27	Expected	2.00		3.00			1.00			1.00		1.00	2.00	1.00	1.00	3.00		1.00	1.00
	Actual	1.88		2.94			1.11			1.00		1.00	1.94	1.07	0.96	2.67		1.04	0.99
15 of 27	Expected	2.00		4.00		1.00	2.00			1.00		1.00	1.00	1.00	1.00	2.00		1.00	
	Actual	2.02		3.93		1.13	2.24			0.95		1.14	0.93	0.94	1.02	1.80		1.00	
16 of 27	Expected			3.00		2.00	1.00	1.00		1.00		1.00	2.00		1.00	4.00		1.00	
	Actual			2.61		1.65	1.09	1.14		0.97		1.00	2.01		1.00	3.61		1.08	
17 of 27	Expected			4.00		2.00	2.00	1.00	1.00		2.00		1.00		1.00	2.00			1.00
	Actual			3.75		1.92	2.02	1.00	0.60 ^a		1.93		1.05		0.89	1.69			0.60 ^a
18 of 27	Expected		1.00	3.00		1.00	1.00	1.00	2.00		2.00		2.00		1.00	2.00			1.00
	Actual		1.15	2.97		0.79	1.01	1.00	1.34 ^a		1.75		2.02		1.00	1.84			0.41 ^a
19 of 27	Expected		1.00	4.00			2.00		2.00		2.00		1.00	1.00	2.00				2.00
	Actual		1.16	3.72			2.03		1.41 ^a		1.91		1.00	1.04	1.90				1.34 ^a
20 of 27	Expected		1.00	5.00		1.00	2.00		1.00	1.00	1.00		1.00	1.00	1.00				2.00
	Actual		1.11	4.73		0.85	1.78		0.96	0.92	0.93		1.00	1.09	0.92				1.93
21 of 27	Expected	1.00		4.00		1.00	2.00			2.00	1.00			1.00		1.00			4.00
	Actual	1.06		3.62		0.94	2.26			1.71	1.00			1.15		1.04			2.19 ^a
22 of 27	Expected	1.00		4.00		1.00	2.00			2.00			2.00		1.00	1.00			3.00
	Actual	1.03		3.68		1.07	1.96			1.91			2.00		1.02	0.97			1.85 ^a
23 of 27	Expected	1.00	1.00	1.00		1.00	2.00		1.00	1.00			2.00		3.00	1.00			3.00
	Actual	1.08	0.99	1.16		1.10	2.01		1.06	1.01			2.00		2.69	1.08			1.66 ^a
24 of 27	Expected	1.00	1.00	1.00		1.00	3.00		1.00	1.00	2.00		2.00		3.00				1.00
	Actual	0.83	1.09	0.85		0.90	2.85		0.99	0.94	1.81		2.00		2.64				0.94
25 of 27	Expected	2.00	1.00	1.00			4.00		1.00	1.00	3.00				2.00	1.00		1.00	
	Actual	1.81	1.10	0.86			4.13		0.98	1.00	2.96				1.70	0.83		1.19	
26 of 27	Expected	3.00		1.00			3.00			1.00	2.00					3.00		1.00	3.00
	Actual	2.85		0.88			3.07			1.00	1.84					2.62		1.11	2.70
27 of 27	Expected	1.00		2.00		1.00	1.00				1.00				1.00	3.00		1.00	3.00
	Actual	0.99		1.89		0.94	1.05				1.00				0.95	2.70		1.09	2.80

^aVal-Ile, Val-Val, Ile-Ile and/or Ile-Val bonds were only partially destroyed during hydrolysis

Date: 14 JUL 2006

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