

An official website of the United States government

Here's how you know



The .gov means it's official.
Federal government websites often end in .gov or .mil. Before sharing sensitive information, make sure you're on a federal government site.

Feedback



The site is secure.

The https:// ensures that you are connecting to the official website and that any information you provide is encrypted and transmitted securely.

Access keys NCBI Homepage MyNCBI Homepage Main Content Main Navigation

$\underline{\textbf{BLAST}^{\:@}} \Rightarrow \underline{\textbf{blastp suite}} \Rightarrow \text{results for RID-UWR232KT013}$

Your search parameters were adjusted to search for a short input sequence.

Job Title Protein Sequence ...

RID UWR232KT013 Search expires on 01-23 19:14 pm

BLASTP Program Database

Icl|Query_5679077 Query ID

unnamed protein product ... Description

amino acid Molecule type **Query Length**

Compare these results against the new Clustered nr database BLAST

×

Descriptions

, 0	Description The state of the	Scientific Name	Max Score	Total Score	Query Cover	E value	Per. Ident	Acc. Len	Accession
	citrate synthase (EC 4.1.3.7) [Escherichia coli]	Escherichia coli	59.6	59.6	100%	1e-09	100.00%	29	AAA23902.1
	citrate/2-methylcitrate synthase [Escherichia coli]	Escherichia coli	59.6	59.6	100%	6e-09	100.00%	50	WP_284344613.1
	citrate (Si)-synthase [Salmonella enterica] citrate/2-methylcitrate synthase [Klebsiella	Salmonella enterica Klebsiella pneumoniae	59.6 59.6	59.6 59.6	100%	7e-09 8e-09	100.00%	56 58	EAM6650575.1 MDU2996401.1
	pneumoniae] hypothetical protein K26_27600 [Klebsiella	Klebsiella pneumoniae	59.6	59.6	100%	9e-09	100.00%	63	KTG66061.1
	pneumoniae] citrate synthase [Salmonella enterica subsp.	Salmonella enterica							
	enterica] citrate/2-methylcitrate synthase [Klebsiella	subsp. enterica	59.6	59.6	100%	9e-09	100.00%	63	<u>VEA57131.1</u>
	pneumoniae]	Klebsiella pneumoniae Enterobacter	59.6	59.6	100%	9e-09	100.00%	64	WP_301952173.1
	citrate (Si)-synthase [Enterobacter hormaechei subsp. steigerwaltii]	hormaechei subsp. steigerwaltii	59.6	59.6	100%	9e-09	100.00%	64	MCU2775335.1
	citrate (Si)-synthase [Bacteroides heparinolyticus]	Bacteroides heparinolyticus	59.6	59.6	100%	9e-09	100.00%	64	MCF0257894.1
	type II citrate synthase [Salmonella enterica subsp. enterica serovar Cubana str. CFSAN001083]	Salmonella enterica subsp. enterica serovar Cubana str. CFSAN001083	59.6	59.6	100%	1e-08	100.00%	65	ESJ47493.1
	TPA: citrate (Si)-synthase [Escherichia coli]	Escherichia coli	59.6	59.6	100%	1e-08	100.00%	66	HCN7185207.1
	citrate/2-methylcitrate synthase [Escherichia coli]	Escherichia coli	59.6	59.6	100%	1e-08	100.00%	67	WP_284693070.1
		Salmonella enterica							
	hypothetical protein L247_31395 [Salmonella enterica subsp. enterica serovar Worthington str. BCH-7253]	subsp. enterica serovar Worthington str. BCH-7253	59.6	59.6	100%	1e-08	100.00%	68	KAF0661692.1
	<u>citrate (Si)-synthase [Salmonella enterica subsp.</u> <u>enterica serovar Montevideo]</u>	Salmonella enterica subsp. enterica serovar Montevideo	59.6	59.6	100%	1e-08	100.00%	69	MDI5535437.1
	citrate (Si)-synthase [Escherichia coli]	Escherichia coli	59.6	59.6	100%	1e-08	100.00%	70	MDM1725853.1
	citrate (Si)-synthase [Escherichia coli]	Escherichia coli	59.6	59.6	100%	1e-08	100.00%	70	MDM1725847.1
	citrate/2-methylcitrate synthase [Escherichia coli]	Escherichia coli	59.6	59.6	100%	1e-08	100.00%	71	WP_284696415.1
	TPA: citrate (Si)-synthase [Escherichia coli]	Escherichia coli	59.6	59.6	100%	1e-08	100.00%	72	HCN8565948.1
	citrate/2-methylcitrate synthase [Salmonella enterica]	Salmonella enterica	59.6	59.6	100%	1e-08	100.00%	73	WP_290367269.1
	hypothetical protein K16_05185 [Klebsiella pneumoniae]	Klebsiella pneumoniae	59.6	59.6	100%	1e-08	100.00%	74	KTG78194.1
	citrate/2-methylcitrate synthase [Escherichia coli]	Escherichia coli	59.6	59.6	100%	1e-08	100.00%	75	WP_284737001.1
	citrate (Si)-synthase [Enterobacter kobei]	Enterobacter kobei	59.6	59.6	100%	1e-08	100.00%	75	MCL7703913.1
	citrate/2-methylcitrate synthase [Escherichia coli]	Escherichia coli	59.6	59.6	100%	1e-08	100.00%	75	WP_316045729.1
	citrate/2-methylcitrate synthase [Escherichia coli]	Escherichia coli	59.6	59.6	100%	1e-08	100.00%	75	WP_284737003.1
	TPA: citrate (Si)-synthase [Salmonella enterica	Salmonella enterica subsp. enterica	59.6	59.6	100%	1e-08	100.00%	76	HCI9980600.1
	citrate (Si)-synthase [Acinetobacter baumannii]	serovar Infantis Acinetobacter	59.6	59.6	100%	1e-08	100.00%	76	MDT1848456.1
	citrate/2-methylcitrate synthase [Klebsiella	baumannii Klebsiella pneumoniae	59.6	59.6	100%	1e-08	100.00%	76	WP 309301862.1
	pneumoniae] citrate/2-methylcitrate synthase [Klebsiella	<u>Klebsiella</u>	59.6	59.6	100%	1e-08	100.00%	77	WP_308298152.1
	michiganensis	michiganensis							
	citrate/2-methylcitrate synthase [Escherichia coli]	Escherichia coli	59.6	59.6	100%	1e-08	100.00%	77 70	WP_289709520.1
	citrate (Si)-synthase [Salmonella enterica]	Salmonella enterica	59.6	59.6	100%	1e-08	100.00%	78	MDJ4914545.1
	citrate/2-methylcitrate synthase [Enterobacter sp.]	Enterobacter sp.	59.6	59.6	100%	1e-08	100.00%	78	MDU2784905.1
	citrate (Si)-synthase [Escherichia coli]	Escherichia coli	59.6	59.6	100%	1e-08	100.00%	78	MC00173501.1
	citrate synthase [Salmonella enterica subsp. enterica]	Salmonella enterica subsp. enterica	59.6	59.6	100%	1e-08	100.00%	78	VEA19626.1
	citrate (Si)-synthase [Klebsiella pneumoniae]	Klebsiella pneumoniae	59.6	59.6	100%	1e-08	100.00%	78	MCL7660528.1
	citrate synthase [Pantoea sp. B_10]	Pantoea sp. B_10	59.6	59.6	100%	1e-08	100.00%	496	WP_150060151.1
	citrate synthase [Pantoea sp. M_5]	Pantoea sp. M_5	59.6	119	100%	1e-08	100.00%	495	WP_150044220.1
	type II citrate synthase [Shigella sonnei]	Shigella sonnei	59.6	59.6	100%	1e-08	100.00%	450	CSQ67231.1
	GItA [Pantoea ananatis LMG 20103]	Pantoea ananatis LMG 20103	59.6	59.6	100%	1e-08	100.00%	449	ADD76337.1
	type II citrate synthase [Pantoea ananatis BRT98]	Pantoea ananatis BRT98	59.6	59.6	100%	1e-08	100.00%	449	PKC44078.1
	citrate synthase [Shigella sonnei]	Shigella sonnei	59.6	59.6	100%	1e-08	100.00%	448	WP_052962268.1
			59.6	59.6	100%			447	
	citrate synthase [Escherichia coli] Citrate synthase (si) [Klebsiella pneumoniae IS22]	Escherichia coli Klebsiella pneumoniae IS22	59.6	59.6	100%	1e-08 1e-08	100.00%	445	MDZ6952340.1 CDK76685.1
	Citrate synthase [Salmonella enterica subsp. enterica serovar Minnesota str. A4-603]	Salmonella enterica subsp. enterica serovar Minnesota str. A4-603	59.6	59.6	100%	1e-08	100.00%	440	EHC72418.1
	citrate (Si)-synthase [Hafnia alvei ATCC 51873]	Hafnia alvei ATCC 51873	59.6	59.6	100%	1e-08	100.00%	439	EHM38178.1
	citrate synthase [Escherichia coli]	51873 Escherichia coli	59.6	59.6	100%	1e-08	100.00%	439	EHU6881247.1
	Citrate synthase [Escherichia con] Citrate synthase [Klebsiella pneumoniae]	Klebsiella pneumoniae	59.6	59.6	100%	1e-08	100.00%	439	CAF2924652.1
	· · · · · · · · · · · · · · · · · · ·								
	citrate synthase [Escherichia coli]	Escherichia coli	59.6	59.6	100%	1e-08	100.00%	433	WP_249532837.1

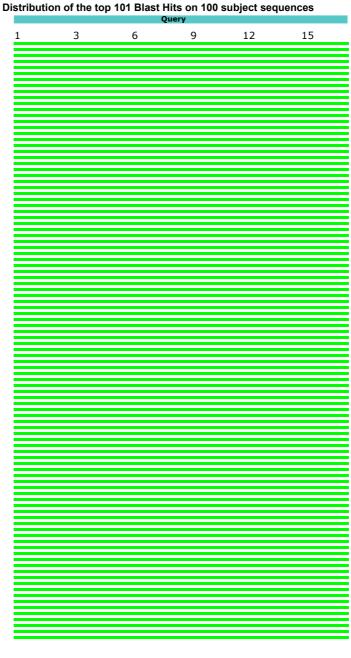
., 0	112024, 13.43			TODI Biast.i	rotein bequen	cc			
	Description ▼	Scientific Name	Max Score	Total Score	Query Cover	E value	Per. Ident	Acc. Len	Accession
		▼	▼	•	▼	▼	•	•	
	citrate synthase [Pantoea sp. QMID1]	Pantoea sp. QMID1	59.6	59.6	100%	1e-08	100.00%	431	GME35117.1
	citrate synthase [Rouxiella badensis]	Rouxiella badensis	59.6	59.6	100%	1e-08	100.00%	431	WP_017493927.1
	citrate synthase [Shigella flexneri]	Shigella flexneri	59.6	59.6	100%	1e-08	100.00%	430	WP_281856488.1
	type II citrate synthase [Salmonella enterica subsp. enterica serovar Heidelberg]	Salmonella enterica subsp. enterica serovar Heidelberg	59.6	59.6	100%	1e-08	100.00%	430	KNN64810.1
	citrate synthase [Salmonella enterica subsp. enterica serovar Heidelberg]	Salmonella enterica subsp. enterica serovar Heidelberg	59.6	59.6	100%	1e-08	100.00%	430	ECS4897850.1
	citrate synthase [Pantoea]	<u>Pantoea</u>	59.6	59.6	100%	1e-08	100.00%	429	WP_126688556.1
	citrate synthase [Winslowiella toletana]	Winslowiella toletana	59.6	59.6	100%	1e-08	100.00%	429	WP_017799198.1
	Citrate synthase [Escherichia coli]	Escherichia coli	59.6	59.6	100%	1e-08	100.00%	429	VCY49824.1
	TPA: citrate (Si)-synthase [Escherichia coli]	Escherichia coli	59.6	59.6	100%	1e-08	100.00%	429	HDV1539492.1
	citrate synthase [Buttiauxella noackiae]	Buttiauxella noackiae	59.6	59.6	100%	1e-08	100.00%	429	WP_064554951.1
	Citrate synthase [Escherichia coli]	Escherichia coli	59.6	59.6	100%	1e-08	100.00%	429	CAC9163158.1
	· · · · · · · · · · · · · · · · · · ·								
	citrate synthase [Pantoea]	<u>Pantoea</u>	59.6	59.6	100%	1e-08	100.00%	429	WP_120451463.1
	citrate synthase [Buttiauxella noackiae]	Buttiauxella noackiae	59.6	59.6	100%	1e-08	100.00%	429	WP_034458778.1
	citrate synthase [Escherichia coli]	Escherichia coli	59.6	59.6	100%	1e-08	100.00%	429	MDW3298543.1
	citrate synthase [Mixta calida]	Mixta calida	59.6	59.6	100%	1e-08	100.00%	429	MDU5192936.1
	citrate synthase [Winslowiella arboricola]	Winslowiella arboricola	59.6	59.6	100%	1e-08	100.00%	429	WP_267143480.1
	citrate synthase [Kosakonia quasisacchari]	Kosakonia guasisacchari	59.6	59.6	100%	1e-08	100.00%	428	WP_131406303.1
	citrate synthase [Kosakonia sp. H02]	Kosakonia sp. H02	59.6	59.6	100%	1e-08	100.00%	428	WLI78337.1
	citrate synthase [Atlantibacter hermannii]	Atlantibacter hermannii	59.6	59.6	100%	1e-08	100.00%	428	WP_313478108.1
	citrate synthase [Candidatus Symbiopectobacterium sp.]	Candidatus Symbiopectobacterium Sp.	59.6	59.6	100%	1e-08	100.00%	428	WP_291970910.1
	citrate synthase [Pectobacterium versatile]	Pectobacterium versatile	59.6	59.6	100%	1e-08	100.00%	428	WP_233980192.1
	citrate synthase [Symbiopectobacterium purcellii]	Symbiopectobacterium purcellii	59.6	59.6	100%	1e-08	100.00%	428	WP_222160025.1
	citrate synthase [Pseudescherichia sp.]	Pseudescherichia sp.	59.6	59.6	100%	1e-08	100.00%	428	WP_312211587.1
	TPA: citrate (Si)-synthase [Enterobacter sp.]	Enterobacter sp.	59.6	59.6	100%	1e-08	100.00%	428	HCH38492.1
	citrate synthase [Enterobacter ludwigii]	Enterobacter ludwigii	59.6	59.6	100%	1e-08	100.00%	428	WP_079231267.1
	citrate synthase [Raoultella sp. BIGb0138]	Raoultella sp. BIGb0138	59.6	59.6	100%	1e-08	100.00%	428	WP_132728053.1
	citrate synthase [Enterobacteriaceae]	Enterobacteriaceae	59.6	59.6	100%	1e-08	100.00%	428	WP_222889910.1
	citrate synthase [Buttiauxella izardii]	Buttiauxella izardii	59.6	59.6	100%	1e-08	100.00%	428	WP_120066216.1
	citrate synthase [Pectobacterium colocasium]	Pectobacterium colocasium	59.6	59.6	100%	1e-08	100.00%	428	WP_225087359.1
	citrate synthase [Ewingella americana]	Ewingella americana	59.6	59.6	100%	1e-08	100.00%	428	WP_140470475.1
	citrate synthase [Pectobacterium versatile]	Pectobacterium versatile	59.6	59.6	100%	1e-08	100.00%	428	WP_130623152.1
	TPA: citrate (Si)-synthase [Leclercia adecarboxylata]	<u>Leclercia</u> <u>adecarboxylata</u>	59.6	59.6	100%	1e-08	100.00%	428	HBU95599.1
	citrate synthase [Buttiauxella warmboldiae]	Buttiauxella warmboldiae	59.6	59.6	100%	1e-08	100.00%	428	WP_124022675.1
	citrate synthase [Pectobacterium sp. F1-1]	Pectobacterium sp. F1- 1	59.6	59.6	100%	1e-08	100.00%	428	WP_263059126.1
	citrate synthase [Buttiauxella sp.]	Buttiauxella sp.	59.6	59.6	100%	1e-08	100.00%	428	WP_324121213.1
	citrate synthase [unidentified bacterial endosymbiont]	unidentified bacterial endosymbiont	59.6	59.6	100%	1e-08	100.00%	428	WP_253378118.1
	citrate synthase [Pseudescherichia sp.]	Pseudescherichia sp.	59.6	59.6	100%	1e-08	100.00%	428	WP_312456457.1
	citrate synthase [Buttiauxella sp. B2]	Buttiauxella sp. B2	59.6	59.6	100%	1e-08	100.00%	428	WP_139881770.1
	citrate synthase [Samsonia erythrinae]	Samsonia erythrinae	59.6	59.6	100%	1e-08	100.00%	428	WP_132452732.1
	citrate synthase [Superficieibacter sp.]	Superficieibacter sp.	59.6	59.6	100%	1e-08	100.00%	428	WP_312949563.1
	citrate synthase [Atlantibacter sp.]	Atlantibacter sp.	59.6	59.6	100%	1e-08	100.00%	428	WP_165462961.1
	citrate synthase [Pseudescherichia sp.]	Pseudescherichia sp.	59.6	59.6	100%	1e-08	100.00%	428	WP_312415508.1
	citrate synthase [Winslowiella toletana]	Winslowiella toletana	59.6	59.6	100%	1e-08	100.00%	428	WP_313856475.1
	citrate synthase [Cronobacter dublinensis]	<u>Cronobacter</u> <u>dublinensis</u>	59.6	59.6	100%	1e-08	100.00%	428	WP_105635862.1
	citrate synthase [Kosakonia sacchari]	Kosakonia sacchari	59.6	59.6	100%	1e-08	100.00%	428	WP_305736724.1
	citrate synthase [Entomohabitans teleogrylli]	Entomohabitans teleogrylli	59.6	59.6	100%	1e-08	100.00%	428	WP_058913582.1
	citrate synthase [Pectobacterium sp. PL64]	Pectobacterium sp. PL64	59.6	59.6	100%	1e-08	100.00%	428	WP_240584825.1
	citrate synthase [Trabulsiella odontotermitis]	Trabulsiella odontotermitis	59.6	59.6	100%	1e-08	100.00%	428	WP_283280384.1
	citrate synthase [Pectobacterium parvum]	Pectobacterium parvum	59.6	59.6	100%	1e-08	100.00%	428	WP_230242980.1
	citrate synthase [Klebsiella pneumoniae]	Klebsiella pneumoniae	59.6	59.6	100%	1e-08	100.00%	428	WP_109022665.1
	citrate synthase [Enterobacter sp. Colony194]	Enterobacter sp. Colony194	59.6	59.6	100%	1e-08	100.00%	428	WP_220266144.1

Description ▼	Scientific Name ▼	Max Score ▼	Total Score ▼	Query Cover	E value	Per. Ident ▼	Acc. Len ▼	Accession
citrate synthase [Leclercia adecarboxylata]	<u>Leclercia</u> <u>adecarboxylata</u>	59.6	59.6	100%	1e-08	100.00%	428	WP_230431293.1
citrate synthase [unclassified Enterobacter]	unclassified Enterobacter	59.6	59.6	100%	1e-08	100.00%	428	WP_072567836.1

Graphic Summary







Alignments

Range 1: 13 to 29

Alignment view Pairwise ✓ □ CDS feature Restore defaults

citrate synthase (EC 4.1.3.7), partial [Escherichia coli] Sequence ID: AAA23902.1 Length: 29 Number of Matches: 1

Score	Expect	Identities	Positives	Gaps	Frame
59.6 bits(133)	1e-09()	17/17(100%)	17/17(100%)	0/17(0%)	

AMGIPSSMFTVIFAMAR AMGIPSSMFTVIFAMAR AMGIPSSMFTVIFAMAR Query 1

citrate/2-methylcitrate synthase, partial [Escherichia coli] Sequence ID: WP_284344613.1 Length: 50 Number of Matches: 1 Range 1: 7 to 23

Score	Expect	Identities	Positives	Gaps	Frame
59.6 bits(133)	6e-09()	17/17(100%)	17/17(100%)	0/17(0%)	
	IPSSMFTVI				

AMGIPSSMFTVIFAMAR AMGIPSSMFTVIFAMAR 23 Sbjct 7

citrate (Si)-synthase [Salmonella enterica]

Sequence ID: EAM6650575.1 Length: 56 Number of Matches: 1

Range 1: 1 to 17

Score	Expect	Identities	Positives	Gaps	Frame
59.6 bits(133)	7e-09()	17/17(100%)	17/17(100%)	0/17(0%)	

AMGIPSSMFTVIFAMAR 17 AMGIPSSMFTVIFAMAR AMGIPSSMFTVIFAMAR 17 Query 1 Sbjct 1

citrate/2-methylcitrate synthase [Klebsiella pneumoniae]

Sequence ID: MDU2996401.1 Length: 58 Number of Matches: 1 Range 1: 3 to 19

Score	Expect	Identities	Positives	Gaps	Frame
59.6 bits(133)	8e-09()	17/17(100%)	17/17(100%)	0/17(0%)	
Oue m 1 AMC	TDCCMETUT	-AMAD 17			

Query 1 19 Sbjct 3

hypothetical protein K26_27600, partial [Klebsiella pneumoniae]

Sequence ID: KTG66061.1 Length: 63 Number of Matches: 1

Range 1: 8 to 24

Score	Expect	Identities	Positives	Gaps	Frame
59.6 bits(133)	9e-09()	17/17(100%)	17/17(100%)	0/17(0%)	
Ouerv 1 AMGTE	PSSMETVTE	-ΔΜΔR 17			

Query Sbjct 8

Taxonomy

Reports

Lineage

Organism	Blast Name	Score	Number of Hits	Description
Bacteria	<u>bacteria</u>		157	
. <u>Gammaproteobacteria</u>	g-proteobacteria		<u>155</u>	
<u>Enterobacterales</u>	<u>enterobacteria</u>		<u>154</u>	
<u>Enterobacteriaceae</u>	enterobacteria		<u>1</u>	
Escherichia coli	<u>enterobacteria</u>	59.6	<u>29</u>	Escherichia coli hits
Salmonella enterica	<u>enterobacteria</u>	59.6	<u>3</u>	Salmonella enterica hits
Klebsiella pneumoniae	enterobacteria	59.6	<u>11</u>	Klebsiella pneumoniae hits
Salmonella enterica subsp. enterica	<u>enterobacteria</u>	59.6	<u>2</u>	Salmonella enterica subsp. enterica hits
Enterobacter hormaechei subsp. steigerwaltii	enterobacteria	59.6	<u>1</u>	Enterobacter hormaechei subsp. steigerwaltii hits
Salmonella enterica subsp. enterica serovar Cubana str. CFSAN001083	enterobacteria	59.6	1	Salmonella enterica subsp. enterica serovar Cubana str. CFSAN001083 hits
<u>Salmonella enterica subsp. enterica serovar Worthington str.</u> BCH-7253	enterobacteria	59.6	1	<u>Salmonella enterica subsp. enterica serovar Worthington str. BCH-7253 hits</u>
Salmonella enterica subsp. enterica serovar Montevideo	<u>enterobacteria</u>	59.6	<u>1</u>	Salmonella enterica subsp. enterica serovar Montevideo hits
Salmonella enterica subsp. enterica serovar 4,[5],12:i:-	<u>enterobacteria</u>	59.6	<u>1</u>	Salmonella enterica subsp. enterica serovar 4,[5],12:i:- hits
Enterobacter kobei	<u>enterobacteria</u>	59.6	<u>1</u>	Enterobacter kobei hits
Salmonella enterica subsp. enterica serovar Infantis	<u>enterobacteria</u>	59.6	<u>1</u>	Salmonella enterica subsp. enterica serovar Infantis hits
Klebsiella michiganensis	<u>enterobacteria</u>	59.6	<u>2</u>	Klebsiella michiganensis hits
<u>Enterobacter sp.</u>	enterobacteria	59.6	<u>2</u>	Enterobacter sp. hits
Shigella sonnei	<u>enterobacteria</u>	59.6	<u>3</u>	Shigella sonnei hits
Klebsiella pneumoniae IS22	<u>enterobacteria</u>	59.6	<u>1</u>	Klebsiella pneumoniae IS22 hits
<u>Salmonella enterica subsp. enterica serovar Minnesota str. A4-603</u>	<u>enterobacteria</u>	59.6	1	<u>Salmonella enterica subsp. enterica serovar Minnesota str. A4-603</u> <u>hits</u>
Shigella flexneri	<u>enterobacteria</u>	59.6	<u>2</u>	Shigella flexneri hits
Salmonella enterica subsp. enterica serovar Heidelberg	enterobacteria	59.6	<u>2</u>	Salmonella enterica subsp. enterica serovar Heidelberg hits
Buttiauxella noackiae	<u>enterobacteria</u>	59.6	<u>3</u>	Buttiauxella noackiae hits
Buttiauxella noackiae ATCC 51607	enterobacteria	59.6	<u>1</u>	Buttiauxella noackiae ATCC 51607 hits

NCBI Blast:Protein Sequence

72024, 13:43		NCBI.	Biast:	Protein Sequence
Kosakonia quasisacchari	enterobacteria	59.6	2	Kosakonia quasisacchari hits
Kosakonia sp. H02	enterobacteria	59.6	<u>1</u>	Kosakonia sp. H02 hits
Atlantibacter hermannii	enterobacteria	59.6	1	Atlantibacter hermannii hits
Candidatus Symbiopectobacterium sp.	enterobacteria	59.6	1	Candidatus Symbiopectobacterium sp. hits
Symbiopectobacterium purcellii	enterobacteria	59.6	2	Symbiopectobacterium purcellii hits
Pseudescherichia sp.	enterobacteria	59.6	3	Pseudescherichia sp. hits
Enterobacter ludwigii	enterobacteria	59.6	2	Enterobacter ludwigii hits
Raoultella sp. BIGb0138	enterobacteria	59.6	2	Raoultella sp. BIGb0138 hits
Buttiauxella izardii	enterobacteria	59.6	2	Buttiauxella izardii hits
Leclercia adecarboxylata	enterobacteria	59.6	3	Leclercia adecarboxylata hits
Buttiauxella warmboldiae	enterobacteria	59.6	2	Buttiauxella warmboldiae hits
<u>Buttiauxella sp.</u>	enterobacteria	59.6	<u>1</u>	Buttiauxella sp. hits
Buttiauxella sp. B2	enterobacteria	59.6	2	Buttiauxella sp. B2 hits
Superficieibacter sp.	enterobacteria	59.6	<u>1</u>	Superficieibacter sp. hits
Atlantibacter sp.	enterobacteria	59.6	1	Atlantibacter sp. hits
Cronobacter dublinensis	enterobacteria	59.6	1	Cronobacter dublinensis hits
Kosakonia sacchari	enterobacteria	59.6	2	Kosakonia sacchari hits
Entomohabitans teleogrylli	enterobacteria	59.6	1	Entomohabitans teleogrylli hits
<u>Trabulsiella odontotermitis</u>	enterobacteria	59.6	2	Trabulsiella odontotermitis hits
Enterobacter sp. Colony194	enterobacteria	59.6	1	Enterobacter sp. Colony194 hits
unclassified Enterobacter	enterobacteria	59.6	1	unclassified Enterobacter hits
Enterobacter sp. PGRG2	enterobacteria	59.6	1	Enterobacter sp. PGRG2 hits
Pantoea sp. B_10	<u>enterobacteria</u>	59.6	2	Pantoea sp. B_10 hits
Pantoea sp. M_5	enterobacteria	59.6	2	Pantoea sp. M_5 hits
Pantoea ananatis LMG 20103	enterobacteria	59.6	1	Pantoea ananatis LMG 20103 hits
Pantoea ananatis 15320	enterobacteria	59.6	1	Pantoea ananatis 15320 hits
<u>Pantoea ananatis</u>	enterobacteria	59.6	2	Pantoea ananatis hits
Pantoea ananatis AJ13355	enterobacteria	59.6	1	Pantoea ananatis AJ13355 hits
Pantoea ananatis BRT98	enterobacteria	59.6	1	Pantoea ananatis BRT98 hits
Hafnia alvei ATCC 51873	enterobacteria	59.6	<u>1</u>	Hafnia alvei ATCC 51873 hits
Pantoea sp. QMID1	enterobacteria	59.6	<u>1</u>	Pantoea sp. QMID1 hits
Rouxiella badensis	enterobacteria	59.6	6	Rouxiella badensis hits
<u>Pantoea</u>	enterobacteria	59.6	2	Pantoea hits
Pantoea sp. ACRSB	enterobacteria	59.6	<u>1</u>	Pantoea sp. ACRSB hits
Pantoea sp. YU22	enterobacteria	59.6	<u>1</u>	Pantoea sp. YU22 hits
Winslowiella toletana	enterobacteria	59.6	<u>4</u>	Winslowiella toletana hits
<u>Pantoea sp.</u>	enterobacteria	59.6	<u>1</u>	Pantoea sp. hits
<u>Pantoea piersonii</u>	enterobacteria	59.6	<u>4</u>	Pantoea piersonii hits
Mixta calida	enterobacteria	59.6	1	Mixta calida hits
Winslowiella arboricola	<u>enterobacteria</u>	59.6	3	Winslowiella arboricola hits
Pectobacterium versatile	enterobacteria	59.6	3	Pectobacterium versatile hits
<u>Enterobacteriaceae</u>	enterobacteria	59.6	<u>1</u>	Enterobacteriaceae hits
Pectobacterium colocasium	enterobacteria	59.6	1	Pectobacterium colocasium hits
<u>Ewingella americana</u>	enterobacteria	59.6	2	Ewingella americana hits
Pectobacterium sp. F1-1	enterobacteria	59.6	2	Pectobacterium sp. F1-1 hits
Samsonia erythrinae	<u>enterobacteria</u>	59.6	2	Samsonia erythrinae hits
Pectobacterium sp. PL64	<u>enterobacteria</u>	59.6	2	Pectobacterium sp. PL64 hits
Pectobacterium parvum	<u>enterobacteria</u>	59.6	2	Pectobacterium parvum hits
Acinetobacter baumannii	g-proteobacteria	59.6	1	Acinetobacter baumannii hits
.Bacteroides heparinolyticus	<u>CFB group</u> <u>bacteria</u>	59.6	<u>1</u>	Bacteroides heparinolyticus hits
.unidentified bacterial endosymbiont	<u>bacteria</u>	59.6	1	unidentified bacterial endosymbiont hits

• Organism

Description	Score	E value	Accession
Escherichia coli [enterobacteria]			
citrate synthase (EC 4.1.3.7), partial [Escherichia coli]	59.6	1e-09	AAA23902
citrate/2-methylcitrate synthase, partial [Escherichia coli]	59.6	6e-09	WP_284344613
citrate (Si)-synthase [Escherichia coli]	59.6	1e-08	HCN7185207
citrate/2-methylcitrate synthase, partial [Escherichia coli]	59.6	1e-08	WP_284693070
citrate (Si)-synthase, partial [Escherichia coli]	59.6	1e-08	KAE9718461
citrate (Si)-synthase [Escherichia coli]	59.6	1e-08	MDM1725853
citrate (Si)-synthase [Escherichia coli]	59.6	1e-08	MDM1725847
citrate/2-methylcitrate synthase, partial [Escherichia coli]	59.6	1e-08	WP_284696415

Description	Score	E value	Accession
citrate (Si)-synthase [Escherichia coli]	59.6	1e-08	MBF7986016
citrate (Si)-synthase [Escherichia coli]	59.6	1e-08	MWM20870
citrate (Si)-synthase [Escherichia coli]	59.6	1e-08	MWR75286
citrate (Si)-synthase [Escherichia coli]	59.6	1e-08	MWT26135
citrate (Si)-synthase [Escherichia coli]	59.6	1e-08	MXJ13823
citrate (Si)-synthase [Escherichia coli]	59.6	1e-08	HCN8565948
citrate/2-methylcitrate synthase, partial [Escherichia coli]	59.6	1e-08	WP_284737001
citrate (Si)-synthase [Escherichia coli]	59.6	1e-08	MBA2037725
citrate/2-methylcitrate synthase, partial [Escherichia coli]	59.6	1e-08	WP_316045729
citrate/2-methylcitrate synthase, partial [Escherichia coli]	59.6	1e-08	WP_284737003
citrate (Si)-synthase [Escherichia coli]	59.6	1e-08	MBA2041438
citrate/2-methylcitrate synthase, partial [Escherichia coli]	59.6	1e-08	WP_289709520
citrate (Si)-synthase [Escherichia coli]	59.6	1e-08	MBA1884166
citrate (Si)-synthase [Escherichia coli]	59.6	1e-08	MC00173501
citrate synthase [Escherichia coli]	59.6	1e-08	MDZ6952340
citrate synthase [Escherichia coli]	59.6	1e-08	EHU6881247
citrate synthase [Escherichia coli]	59.6	1e-08	WP_249532837
Citrate synthase [Escherichia coli]	59.6	1e-08	VCY49824
citrate (Si)-synthase [Escherichia coli]	59.6	1e-08	HDV1539492
Citrate synthase [Escherichia coli]	59.6	1e-08	CAC9163158
citrate synthase [Escherichia coli]	59.6	1e-08	MDW3298543
Salmonella enterica [enterobacteria]			
citrate (Si)-synthase [Salmonella enterica]	59.6	7e-09	EAM6650575
citrate/2-methylcitrate synthase, partial [Salmonella enterica]	59.6	1e-08	WP_290367269
citrate (Si)-synthase [Salmonella enterica]	59.6	1e-08	MDJ4914545
Klebsiella pneumoniae [enterobacteria]			
citrate/2-methylcitrate synthase (Klebsiella pneumoniae)	59.6	8e-09	MDU2996401
hypothetical protein K26_27600, partial [Klebsiella pneumoniae]	59.6	9e-09	KTG66061
citrate/2-methylcitrate synthase, partial [Klebsiella pneumoniae]	59.6	9e-09	WP_301952173
<u>citrate (Si)-synthase [Klebsiella pneumoniae]</u>	59.6	9e-09	NDR82707
hypothetical protein K16_05185, partial [Klebsiella pneumoniae]	59.6	1e-08	KTG78194
citrate/2-methylcitrate synthase, partial [Klebsiella pneumoniae]	59.6	1e-08	WP_309301862
citrate (Si)-synthase, partial [Klebsiella pneumoniae]	59.6	1e-08	RBN11767
citrate (Si)-synthase [Klebsiella pneumoniae]	59.6	1e-08	MCL7660528
Citrate synthase, partial [Klebsiella pneumoniae]	59.6	1e-08	CAF2924652
Citrate synthase, partial [Klebsiella pneumoniae]	59.6	1e-08	CAH6604484
citrate synthase [Klebsiella pneumoniae]	59.6	1e-08	WP_109022665
Salmonella enterica subsp. enterica [enterobacteria]			
citrate synthase [Salmonella enterica subsp. enterica]	59.6	9e-09	<u>VEA57131</u>
citrate synthase [Salmonella enterica subsp. enterica]	59.6	1e-08	<u>VEA19626</u>
Enterobacter hormaechei subsp. steigerwaltii [enterobacteria]			
citrate (Si)-synthase [Enterobacter hormaechei subsp. steigerwaltii]	59.6	9e-09	MCU2775335
Bacteroides heparinolyticus [CFB group bacteria]			
citrate (Si)-synthase [Bacteroides heparinolyticus]	59.6	9e-09	MCF0257894
Salmonella enterica subsp. enterica serovar Cubana str. CFSAN001083 [enterobacteria]			
type II citrate synthase, partial [Salmonella enterica subsp. enterica serovar Cubana str. CFSAN001083]	59.6	1e-08	ESJ47493
Salmonella enterica subsp. enterica serovar Worthington str. BCH-7253 [enterobacteria]	F0 -	4 00	WARRA
hypothetical protein L247_31395, partial [Salmonella enterica subsp. enterica serovar Worthington str. BCH-7253]	59.6	1e-08	KAF0661692
Salmonella enterica subsp. enterica serovar Montevideo [enterobacteria]	F0.1	1-00	MADIFFEE
citrate (Si)-synthase [Salmonella enterica subsp. enterica serovar Montevideo]	59.6	1e-08	MDI5535437
Salmonella enterica subsp. enterica serovar 4,[5],12:i:- [enterobacteria]	F0.1	1-00	WILL CASS
type II citrate synthase, partial [Salmonella enterica subsp. enterica serovar 4,[5],12:i:-]	59.6	1e-08	KUA64007
Enterobacter kobei [enterobacteria]	E0.1	1- 00	MOI 7700040
citrate (Si)-synthase [Enterobacter kobei]	59.6	1e-08	MCL7703913
Salmonella enterica subsp. enterica serovar Infantis [enterobacteria]	E0.1	1- 00	Hologocoo
citrate (Si)-synthase [Salmonella enterica subsp. enterica serovar Infantis]	59.6	1e-08	HCI9980600
Acinetobacter baumannii [g-proteobacteria]	E0.4	1. 00	MDT4040454
citrate (Si)-synthase [Acinetobacter baumannii]	59.6	1e-08	MDT1848456
Klebsiella michiganensis [enterobacteria]	E0.6	10.00	WD 200200450
citrate/2-methylcitrate synthase, partial [Klebsiella michiganensis]	59.6	1e-08	WP_308298152
citrate (Si)-synthase, partial [Klebsiella michiganensis] Enterobacter sp. [enterobacteria]	59.6	1e-08	PLN97258
Enterobacter sp. [enterobacteria]			

Description	Score	E value	Accession
citrate/2-methylcitrate synthase [Enterobacter sp.]	59.6	1e-08	MDU2784905
citrate (Si)-synthase [Enterobacter sp.]	59.6	1e-08	HCH38492
Pantoea sp. B_10 [enterobacteria]			
citrate synthase [Pantoea sp. B_10]	59.6	1e-08	WP_150060151
citrate (Si)-synthase [Pantoea sp. B_10]	59.6	1e-08	KAA6108663
Pantoea sp. M_5 [enterobacteria]			
citrate synthase [Pantoea sp. M_5]	59.6	1e-08	WP_150044220
citrate synthase [Pantoea sp. M_5]	59.6	1e-08	KAA5993256
Shigella sonnei [enterobacteria]			
type II citrate synthase [Shigella sonnei]	59.6	1e-08	CSQ67231
citrate synthase [Shigella sonnei]	59.6	1e-08	WP_052962268
type II citrate synthase [Shigella sonnei]	59.6	1e-08	CSQ50521
Pantoea ananatis LMG 20103 [enterobacteria]			
GltA [Pantoea ananatis LMG 20103]	59.6	1e-08	ADD76337
Pantoea ananatis 15320 [enterobacteria]			
type II citrate synthase [Pantoea ananatis 15320]	59.6	1e-08	PKC39322
Pantoea ananatis [enterobacteria]			
Citrate synthase [Pantoea ananatis]	59.6	1e-08	CRH28639
Citrate synthase [Pantoea ananatis]	59.6	1e-08	CRH33056
Pantoea ananatis AJ13355 [enterobacteria]			_
citrate synthase GltA [Pantoea ananatis AJ13355]	59.6	1e-08	BAK10570
Pantoea ananatis BRT98 [enterobacteria]			
type II citrate synthase [Pantoea ananatis BRT98]	59.6	1e-08	PKC44078
Klebsiella pneumoniae IS22 [enterobacteria]			
Citrate synthase (si) [Klebsiella pneumoniae IS22]	59.6	1e-08	CDK76685
Salmonella enterica subsp. enterica serovar Minnesota str. A4-603 [enterobacteria]			
Citrate synthase [Salmonella enterica subsp. enterica serovar Minnesota str. A4-603]	59.6	1e-08	EHC72418
Hafnia alvei ATCC 51873 [enterobacteria]		**	
citrate (Si)-synthase [Hafnia alvei ATCC 51873]	59.6	1e-08	EHM38178
Pantoea sp. QMID1 [enterobacteria]		**	
citrate synthase [Pantoea sp. QMID1]	59.6	1e-08	GME35117
Rouxiella badensis [enterobacteria]			
citrate synthase [Rouxiella badensis]	59.6	1e-08	WP_017493927
citrate synthase [Rouxiella badensis]	59.6	1e-08	MCC3702339
citrate synthase [Rouxiella badensis]	59.6	1e-08	MCC3717345
citrate synthase [Rouxiella badensis]	59.6	1e-08	MCC3728441
citrate synthase [Rouxiella badensis]	59.6	1e-08	MCC3732345
citrate synthase [Rouxiella badensis]	59.6	1e-08	MCC3740185
Shigella flexneri [enterobacteria]	03.0	10 00	<u> </u>
citrate synthase [Shigella flexneri]	59.6	1e-08	WP_281856488
	59.6		
citrate synthase [Shigella flexneri] Salmonella enterica subsp. enterica servivar Heidelhern (Ienterohacteria 1	37.0	1e-08	<u>GLG66263</u>
Salmonella enterica subsp. enterica serovar Heidelberg [enterobacteria]	50 4	10-00	KNNE4010
type II citrate synthase [Salmonella enterica subsp. enterica serovar Heidelberg]	59.6	1e-08	KNN64810
citrate synthase [Salmonella enterica subsp. enterica serovar Heidelberg]	59.6	1e-08	ECS4897850
			WD 406600551
Pantoea [enterobacteria]	E0 6	10.00	WP_126688556
Pantoea [enterobacteria] MULTISPECIES: citrate synthase [Pantoea]	59.6	1e-08	WD 400454445
Pantoea [enterobacteria] MULTISPECIES: citrate synthase [Pantoea] MULTISPECIES: citrate synthase [Pantoea]	59.6 59.6	1e-08 1e-08	WP_120451463
Pantoea [enterobacteria] MULTISPECIES: citrate synthase [Pantoea] MULTISPECIES: citrate synthase [Pantoea] Pantoea sp. ACRSB [enterobacteria]	59.6	1e-08	
Pantoea [enterobacteria] MULTISPECIES: citrate synthase [Pantoea] MULTISPECIES: citrate synthase [Pantoea] Pantoea sp. ACRSB [enterobacteria] citrate synthase [Pantoea sp. ACRSB]			WP_120451463 MCG7387777
Pantoea [enterobacteria] MULTISPECIES: citrate synthase [Pantoea] MULTISPECIES: citrate synthase [Pantoea] Pantoea sp. ACRSB [enterobacteria] citrate synthase [Pantoea sp. ACRSB] Pantoea sp. YU22 [enterobacteria]	59.6 59.6	1e-08	MCG7387777
Pantoea [enterobacteria] MULTISPECIES: citrate synthase [Pantoea] MULTISPECIES: citrate synthase [Pantoea] Pantoea sp. ACRSB [enterobacteria] citrate synthase [Pantoea sp. ACRSB] Pantoea sp. YU22 [enterobacteria] citrate synthase [Pantoea sp. YU22]	59.6	1e-08	
Pantoea [enterobacteria] MULTISPECIES: citrate synthase [Pantoea] MULTISPECIES: citrate synthase [Pantoea] Pantoea sp. ACRSB [enterobacteria] citrate synthase [Pantoea sp. ACRSB] Pantoea sp. YU22 [enterobacteria] citrate synthase [Pantoea sp. YU22] Winslowiella toletana [enterobacteria]	59.6 59.6 59.6	1e-08 1e-08	MCG7387777 RTY59677
Pantoea [enterobacteria] MULTISPECIES: citrate synthase [Pantoea] MULTISPECIES: citrate synthase [Pantoea] Pantoea sp. ACRSB [enterobacteria] citrate synthase [Pantoea sp. ACRSB] Pantoea sp. YU22 [enterobacteria] citrate synthase [Pantoea sp. YU22] Winslowiella toletana [enterobacteria] citrate synthase [Winslowiella toletana]	59.6 59.6 59.6	1e-08 1e-08 1e-08	MCG7387777 RTY59677 WP_017799198
Pantoea [enterobacteria] MULTISPECIES: citrate synthase [Pantoea] MULTISPECIES: citrate synthase [Pantoea] Pantoea sp. ACRSB [enterobacteria] citrate synthase [Pantoea sp. ACRSB] Pantoea sp. YU22 [enterobacteria] citrate synthase [Pantoea sp. YU22] Winslowiella toletana [enterobacteria] citrate synthase [Winslowiella toletana] citrate synthase [Winslowiella toletana]	59.6 59.6 59.6 59.6	1e-08 1e-08 1e-08 1e-08	MCG7387777 RTY59677 WP_017799198 MBP2170377
Pantoea [enterobacteria] MULTISPECIES: citrate synthase [Pantoea] MULTISPECIES: citrate synthase [Pantoea] Pantoea sp. ACRSB [enterobacteria] citrate synthase [Pantoea sp. ACRSB] Pantoea sp. YU22 [enterobacteria] citrate synthase [Pantoea sp. YU22] Winslowiella toletana [enterobacteria] citrate synthase [Winslowiella toletana] citrate synthase [Winslowiella toletana]	59.6 59.6 59.6 59.6 59.6 59.6	1e-08 1e-08 1e-08 1e-08 1e-08	MCG7387777 RTY59677 WP_017799198 MBP2170377 WP_313856475
Pantoea [enterobacteria] MULTISPECIES: citrate synthase [Pantoea] MULTISPECIES: citrate synthase [Pantoea] Pantoea sp. ACRSB [enterobacteria] citrate synthase [Pantoea sp. ACRSB] Pantoea sp. YU22 [enterobacteria] citrate synthase [Pantoea sp. YU22] Winslowiella toletana [enterobacteria] citrate synthase [Winslowiella toletana] citrate synthase [Winslowiella toletana] citrate synthase [Winslowiella toletana] citrate synthase [Winslowiella toletana]	59.6 59.6 59.6 59.6	1e-08 1e-08 1e-08 1e-08	MCG7387777 RTY59677 WP_017799198 MBP2170377
Pantoea [enterobacteria] MULTISPECIES: citrate synthase [Pantoea] MULTISPECIES: citrate synthase [Pantoea] Pantoea sp. ACRSB [enterobacteria] citrate synthase [Pantoea sp. ACRSB] Pantoea sp. YU22 [enterobacteria] citrate synthase [Pantoea sp. YU22] Winslowiella toletana [enterobacteria] citrate synthase [Winslowiella toletana] citrate synthase [Winslowiella toletana]	59.6 59.6 59.6 59.6 59.6 59.6	1e-08 1e-08 1e-08 1e-08 1e-08	MCG7387777 RTY59677 WP_017799198 MBP2170377 WP_313856475
Pantoea [enterobacteria] MULTISPECIES: citrate synthase [Pantoea] MULTISPECIES: citrate synthase [Pantoea] Pantoea sp. ACRSB [enterobacteria] citrate synthase [Pantoea sp. ACRSB] Pantoea sp. YU22 [enterobacteria] citrate synthase [Pantoea sp. YU22] Winslowiella toletana [enterobacteria] citrate synthase [Winslowiella toletana] citrate synthase [Winslowiella toletana] citrate synthase [Winslowiella toletana] citrate synthase [Winslowiella toletana]	59.6 59.6 59.6 59.6 59.6 59.6	1e-08 1e-08 1e-08 1e-08 1e-08	MCG7387777 RTY59677 WP_017799198 MBP2170377 WP_313856475
Pantoea [enterobacteria] MULTISPECIES: citrate synthase [Pantoea] MULTISPECIES: citrate synthase [Pantoea] Pantoea sp. ACRSB [enterobacteria] citrate synthase [Pantoea sp. ACRSB] Pantoea sp. YU22 [enterobacteria] citrate synthase [Pantoea sp. YU22] Winslowiella toletana [enterobacteria] citrate synthase [Winslowiella toletana]	59.6 59.6 59.6 59.6 59.6 59.6 59.6	1e-08 1e-08 1e-08 1e-08 1e-08 1e-08	MCG7387777 RTY59677 WP_017799198 MBP2170377 WP_313856475 WNN45637
Pantoea [enterobacteria] MULTISPECIES: citrate synthase [Pantoea] MULTISPECIES: citrate synthase [Pantoea] Pantoea sp. ACRSB [enterobacteria] citrate synthase [Pantoea sp. ACRSB] Pantoea sp. YU22 [enterobacteria] citrate synthase [Pantoea sp. YU22] Winslowiella toletana [enterobacteria] citrate synthase [Winslowiella toletana] citrate synthase [Buttiauxella noackiae]	59.6 59.6 59.6 59.6 59.6 59.6 59.6	1e-08 1e-08 1e-08 1e-08 1e-08 1e-08 1e-08	MCG7387777 RTY59677 WP_017799198 MBP2170377 WP_313856475 WNN45637 WP_064554951

024, 13.43	TVEBT Blast. Totelii Sequence			
Description		Score	E value	Accession
Pantoea sp. [enterobacteria]				
citrate synthase [Pantoea sp.]		59.6	1e-08	MDU6432426
Pantoea piersonii [enterobacteria]				
citrate synthase [Pantoea piersonii]		59.6	1e-08	MBZ6385798
citrate synthase [Pantoea piersonii]		59.6	1e-08	MBZ6401231
citrate synthase [Pantoea piersonii]		59.6	1e-08	MBZ6409495
citrate synthase [Pantoea piersonii]		59.6	1e-08	MBZ6427925
Mixta calida [enterobacteria]		33.0	16 00	WD20427 725
citrate synthase [Mixta calida]		59.6	1e-08	MDU5192936
		33.0	16 00	MD03172730
		59.6	10.00	WD 267142490
citrate synthase [Winslowiella arboricola]			1e-08	WP_267143480
citrate synthase [Winslowiella arboricola]		59.6	1e-08	MCU5774197
citrate synthase [Winslowiella arboricola]		59.6	1e-08	MCU5776870
Kosakonia quasisacchari [enterobacteria]		F0.6	1 00	WD 40440400
citrate synthase [Kosakonia quasisacchari]		59.6	1e-08	WP_131406303
citrate synthase [Kosakonia quasisacchari]		59.6	1e-08	TCC14968
Kosakonia sp. H02 [enterobacteria]				
citrate synthase [Kosakonia sp. H02]		59.6	1e-08	WLI78337
Atlantibacter hermannii [enterobacteria]				
citrate synthase [Atlantibacter hermannii]		59.6	1e-08	WP_313478108
Candidatus Symbiopectobacterium sp. [enterobacteria]				
citrate synthase [Candidatus Symbiopectobacterium sp.]		59.6	1e-08	WP_291970910
Pectobacterium versatile [enterobacteria]				
citrate synthase [Pectobacterium versatile]		59.6	1e-08	WP_233980192
citrate synthase [Pectobacterium versatile]		59.6	1e-08	WP_130623152
citrate synthase [Pectobacterium versatile]		59.6	1e-08	TAI84867
Symbiopectobacterium purcellii [enterobacteria]				
citrate synthase [Symbiopectobacterium purcellii]		59.6	1e-08	WP_222160025
citrate synthase [Symbiopectobacterium purcellii]		59.6	1e-08	QZN97014
Pseudescherichia sp. [enterobacteria]				
citrate synthase [Pseudescherichia sp.]		59.6	1e-08	WP_312211587
citrate synthase [Pseudescherichia sp.]		59.6	1e-08	WP_312456457
citrate synthase [Pseudescherichia sp.]	:	59.6	1e-08	WP_312415508
Enterobacter ludwigii [enterobacteria]				
citrate synthase [Enterobacter ludwigii]		59.6	1e-08	WP_079231267
citrate synthase [Enterobacter ludwigii]		59.6	1e-08	RTN58976
Raoultella sp. BIGb0138 [enterobacteria]				
citrate synthase [Raoultella sp. BIGb0138]		59.6	1e-08	WP_132728053
citrate synthase [Raoultella sp. BIGb0138]		59.6	1e-08	TCW16892
Enterobacteriaceae [enterobacteria]		03.0		
MULTISPECIES: citrate synthase [Enterobacteriaceae]		59.6	1e-08	WP_222889910
Buttiauxella izardii [enterobacteria]		07.0	10 00	*** _222009910
citrate synthase [Buttiauxella izardii]		59.6	1e-08	WP_120066216
citrate synthase [Buttiauxella izardii] Pectobacterium colocasium [enterobacteria]		59.6	1e-08	RJT19432
		F0.6	1- 00	WD 005007050
citrate synthase [Pectobacterium colocasium]		59.6	1e-08	WP_225087359
Ewingella americana [enterobacteria]		F0.6	4 65	
citrate synthase [Ewingella americana]		59.6	1e-08	WP_140470475
citrate synthase [Ewingella americana]		59.6	1e-08	TPG63950
Leclercia adecarboxylata [enterobacteria]				
citrate (Si)-synthase [Leclercia adecarboxylata]		59.6	1e-08	HBU95599
citrate synthase [Leclercia adecarboxylata]		59.6	1e-08	WP_230431293
citrate synthase [Leclercia adecarboxylata]		59.6	1e-08	<u>UFM70797</u>
Buttiauxella warmboldiae [enterobacteria]				
citrate synthase [Buttiauxella warmboldiae]		59.6	1e-08	WP_124022675
		59.6	1e-08	RPH30384
citrate synthase [Buttiauxella warmboldiae]				
<u>citrate synthase [Buttiauxella warmboldiae]</u> Pectobacterium sp. F1-1 [enterobacteria]				
		59.6	1e-08	WP_263059126
Pectobacterium sp. F1-1 [enterobacteria]		59.6 59.6	1e-08 1e-08	WP_263059126 UYA59533
Pectobacterium sp. F1-1 [enterobacteria] citrate synthase [Pectobacterium sp. F1-1]				
Pectobacterium sp. F1-1 [enterobacteria] citrate synthase [Pectobacterium sp. F1-1] Citrate synthase (si) [Pectobacterium sp. F1-1]				

Description	Score	E value	Accession
citrate synthase [unidentified bacterial endosymbiont]	59.6	1e-08	WP_253378118
Buttiauxella sp. B2 [enterobacteria]			
citrate synthase [Buttiauxella sp. B2]	59.6	1e-08	WP_139881770
citrate synthase [Buttiauxella sp. B2]	59.6	1e-08	TNV17980
Samsonia erythrinae [enterobacteria]			
citrate synthase [Samsonia erythrinae]	59.6	1e-08	WP_132452732
citrate synthase [Samsonia erythrinae]	59.6	1e-08	TCV08894
Superficieibacter sp. [enterobacteria]			
citrate synthase [Superficieibacter sp.]	59.6	1e-08	WP_312949563
Atlantibacter sp. [enterobacteria]			
citrate synthase [Atlantibacter sp.]	59.6	1e-08	WP_165462961
Cronobacter dublinensis [enterobacteria]			
citrate synthase [Cronobacter dublinensis]	59.6	1e-08	WP_105635862
Kosakonia sacchari [enterobacteria]			
citrate synthase [Kosakonia sacchari]	59.6	1e-08	WP_305736724
citrate synthase [Kosakonia sacchari]	59.6	1e-08	W0Z76207
Entomohabitans teleogrylli [enterobacteria]			
citrate synthase [Entomohabitans teleogrylli]	59.6	1e-08	WP_058913582
Pectobacterium sp. PL64 [enterobacteria]			
citrate synthase [Pectobacterium sp. PL64]	59.6	1e-08	WP_240584825
citrate synthase [Pectobacterium sp. PL64]	59.6	1e-08	<u>UM088729</u>
Trabulsiella odontotermitis [enterobacteria]			
citrate synthase [Trabulsiella odontotermitis]	59.6	1e-08	WP_283280384
citrate synthase [Trabulsiella odontotermitis]	59.6	1e-08	WHP30057
Pectobacterium parvum [enterobacteria]			
citrate synthase [Pectobacterium parvum]	59.6	1e-08	WP_230242980
citrate synthase [Pectobacterium parvum]	59.6	1e-08	<u>UFK40529</u>
Enterobacter sp. Colony194 [enterobacteria]			
citrate synthase [Enterobacter sp. Colony194]	59.6	1e-08	WP_220266144
unclassified Enterobacter [enterobacteria]			
MULTISPECIES: citrate synthase [unclassified Enterobacter]	59.6	1e-08	WP_072567836
Enterobacter sp. PGRG2 [enterobacteria]			
citrate synthase [Enterobacter sp. PGRG2]	59.6	1e-08	WJD47882

Taxonomy

xonomy	Number of hits	Number of Organisms	Description
acteria	<u>157</u>	71	
<u>Gammaproteobacteria</u>	<u>155</u>	69	
Enterobacterales	<u>154</u>	68	
. Enterobacteriaceae	<u>1</u>	43	Enterobacteriaceae hits
<u>Escherichia coli</u>	<u>29</u>	1	Escherichia coli hits
<u>Salmonella</u>	<u>13</u>	9	
Salmonella enterica	<u>3</u>	9	Salmonella enterica hits
Salmonella enterica subsp. enterica	2	8	Salmonella enterica subsp. enterica hits
<u>Salmonella enterica subsp. enterica serovar Cubana str.</u> CFSAN001083	<u>1</u>	1	Salmonella enterica subsp. enterica serovar Cubana str. CFSAN00108 hits
<u>Salmonella enterica subsp. enterica serovar Worthington str. BCH-</u> 253	<u>1</u>	1	Salmonella enterica subsp. enterica serovar Worthington str. BCH-725 hits
Salmonella enterica subsp. enterica serovar Montevideo	<u>1</u>	1	Salmonella enterica subsp. enterica serovar Montevideo hits
Salmonella enterica subsp. enterica serovar 4,[5],12:i:-	<u>1</u>	1	Salmonella enterica subsp. enterica serovar 4,[5],12:i:- hits
Salmonella enterica subsp. enterica serovar Infantis	<u>1</u>	1	Salmonella enterica subsp. enterica serovar Infantis hits
Salmonella enterica subsp. enterica serovar Minnesota str. A4-603	<u>1</u>	1	Salmonella enterica subsp. enterica serovar Minnesota str. A4-603 hit
Salmonella enterica subsp. enterica serovar Heidelberg	2	1	Salmonella enterica subsp. enterica serovar Heidelberg hits
<u>Klebsiella/Raoultella group</u>	<u>16</u>	4	
<u>Klebsiella</u>	<u>14</u>	3	
<u>Klebsiella pneumoniae</u>	<u>11</u>	2	Klebsiella pneumoniae hits
Klebsiella pneumoniae IS22	<u>1</u>	1	Klebsiella pneumoniae IS22 hits
Klebsiella michiganensis	2	1	Klebsiella michiganensis hits
Raoultella sp. BIGb0138	2	1	Raoultella sp. BIGb0138 hits
Enterobacter	<u>9</u>	7	
Enterobacter cloacae complex	<u>4</u>	3	
Enterobacter hormaechei subsp. steigerwaltii	<u>1</u>	1	Enterobacter hormaechei subsp. steigerwaltii hits
Enterobacter kobei	<u>1</u>	1	Enterobacter kobei hits

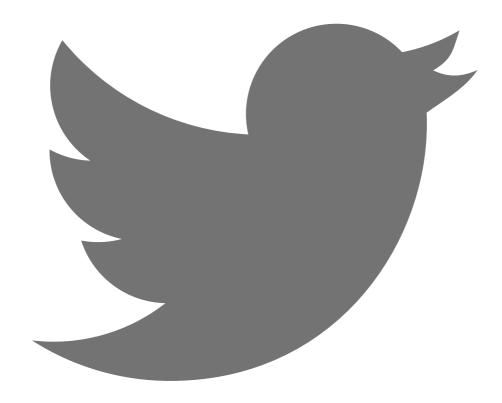
NCBI Blast:Protein Sequence

		NCBI Blast	t:Protein Sequence
Enterobacter ludwigii	<u>2</u>	1	Enterobacter ludwigii hits
unclassified Enterobacter	<u>1</u>	4	unclassified Enterobacter hits
Enterobacter sp.	<u>2</u>	1	Enterobacter sp. hits
Enterobacter sp. Colony194	<u>1</u>	1	Enterobacter sp. Colony194 hits
Enterobacter sp. PGRG2	<u>1</u>	1	Enterobacter sp. PGRG2 hits
Shigella	<u>5</u>	2	
Shigella sonnei	<u>3</u>	1	Shigella sonnei hits
Shiqella flexneri	<u>2</u>	1	Shigella flexneri hits
Buttiauxella	_ 11	6	
Buttiauxella noackiae	<u> </u>	2	Buttiauxella noackiae hits
Buttiauxella noackiae ATCC 51607	1	1	Buttiauxella noackiae ATCC 51607 hits
Buttiauxella izardii	<u>-</u> <u>2</u>	1	Buttiauxella izardii hits
Buttiauxella warmboldiae	<u>=</u> <u>2</u>	1	Buttiauxella warmboldiae hits
unclassified Buttiauxella	<u>=</u> 3	2	Buttadaxella Walfilboldide Ilito
Buttiauxella sp.	1	1	Buttiauxella sp. hits
		1	Buttiauxella sp. B2 hits
Buttiauxella sp. B2	<u>2</u>	3	buttiauxeila sp. bz iiits
Kosakonia	<u>5</u>		Vacakania guasiasaahani bita
Kosakonia quasisacchari	2	1	Kosakonia quasisacchari hits
Kosakonia sp. H02	1	1	Kosakonia sp. H02 hits
Kosakonia sacchari	<u>2</u>	1	Kosakonia sacchari hits
<u>Atlantibacter</u>	2	2	
Atlantibacter hermannii	<u>1</u>	1	Atlantibacter hermannii hits
Atlantibacter sp.	<u>1</u>	1	Atlantibacter sp. hits
<u>Symbiopectobacterium</u>	<u>3</u>	2	
Candidatus Symbiopectobacterium sp.	<u>1</u>	1	Candidatus Symbiopectobacterium sp. hits
<u>Symbiopectobacterium purcellii</u>	<u>2</u>	1	Symbiopectobacterium purcellii hits
<u>Pseudescherichia sp.</u>	<u>3</u>	1	Pseudescherichia sp. hits
Leclercia adecarboxylata	<u>3</u>	1	Leclercia adecarboxylata hits
Superficieibacter sp.	<u>1</u>	1	Superficieibacter sp. hits
Cronobacter dublinensis	<u>1</u>	1	Cronobacter dublinensis hits
Entomohabitans teleogrylli	<u>1</u>	1	Entomohabitans teleogrylli hits
<u>Trabulsiella odontotermitis</u>	<u>2</u>	1	Trabulsiella odontotermitis hits
<u>Erwiniaceae</u>	<u>28</u>	16	
<u>Pantoea</u>	<u>2</u>	13	Pantoea hits
unclassified Pantoea	8	6	
Pantoea sp. B_10	<u>2</u>	1	Pantoea sp. B_10 hits
Pantoea sp. M_5	<u>2</u>	1	Pantoea sp. M_5 hits
Pantoea sp. QMID1	1	1	Pantoea sp. QMID1 hits
Pantoea sp. ACRSB	1	1	Pantoea sp. ACRSB hits
Pantoea sp. YU22	<u> </u>	1	Pantoea sp. YU22 hits
Pantoea sp.	1	1	Pantoea sp. hits
 '-			
Pantoea ananatic	-		
Pantoea ananatis Pantoea ananatis LMC 20102	<u>2</u>	5	Pantoea ananatis hits
Pantoea ananatis LMG 20103	<u>2</u> <u>1</u>	5 1	Pantoea ananatis hits Pantoea ananatis LMG 20103 hits
Pantoea ananatis LMG 20103 Pantoea ananatis 15320	2 1 1	5 1 1	Pantoea ananatis hits Pantoea ananatis LMG 20103 hits Pantoea ananatis 15320 hits
Pantoea ananatis LMG 20103 Pantoea ananatis 15320 Pantoea ananatis AJ13355	2 1 1	5 1 1 1	Pantoea ananatis hits Pantoea ananatis LMG 20103 hits Pantoea ananatis 15320 hits Pantoea ananatis AJ13355 hits
Pantoea ananatis LMG 20103 Pantoea ananatis 15320 Pantoea ananatis AJ13355 Pantoea ananatis BRT98	2 1 1 1	5 1 1 1	Pantoea ananatis hits Pantoea ananatis LMG 20103 hits Pantoea ananatis 15320 hits Pantoea ananatis AJ13355 hits Pantoea ananatis BRT98 hits
Pantoea ananatis LMG 20103 Pantoea ananatis 15320 Pantoea ananatis AJ13355 Pantoea ananatis BRT98 Pantoea piersonii	2 1 1 1 1 4	5 1 1 1 1	Pantoea ananatis hits Pantoea ananatis LMG 20103 hits Pantoea ananatis 15320 hits Pantoea ananatis AJ13355 hits
Pantoea ananatis LMG 20103 Pantoea ananatis 15320 Pantoea ananatis AJ13355 Pantoea ananatis BRT98 Pantoea piersonii Winslowiella	2 1 1 1 1 4 2	5 1 1 1 1 1 2	Pantoea ananatis hits Pantoea ananatis LMG 20103 hits Pantoea ananatis 15320 hits Pantoea ananatis AJ13355 hits Pantoea ananatis BRT98 hits Pantoea piersonii hits
Pantoea ananatis LMG 20103 Pantoea ananatis 15320 Pantoea ananatis AJ13355 Pantoea ananatis BRT98 Pantoea piersonii	2 1 1 1 1 4 2	5 1 1 1 1	Pantoea ananatis hits Pantoea ananatis LMG 20103 hits Pantoea ananatis 15320 hits Pantoea ananatis AJ13355 hits Pantoea ananatis BRT98 hits
Pantoea ananatis LMG 20103 Pantoea ananatis 15320 Pantoea ananatis AJ13355 Pantoea ananatis BRT98 Pantoea piersonii Winslowiella	2 1 1 1 1 4 2	5 1 1 1 1 1 2	Pantoea ananatis hits Pantoea ananatis LMG 20103 hits Pantoea ananatis 15320 hits Pantoea ananatis AJ13355 hits Pantoea ananatis BRT98 hits Pantoea piersonii hits
Pantoea ananatis LMG 20103 Pantoea ananatis 15320 Pantoea ananatis AJ13355 Pantoea ananatis BRT98 Pantoea piersonii Winslowiella Winslowiella toletana	2 1 1 1 1 4 2	5 1 1 1 1 1 2	Pantoea ananatis hits Pantoea ananatis LMG 20103 hits Pantoea ananatis 15320 hits Pantoea ananatis AJ13355 hits Pantoea ananatis BRT98 hits Pantoea piersonii hits Winslowiella toletana hits
Pantoea ananatis LMG 20103 Pantoea ananatis 15320 Pantoea ananatis AJ13355 Pantoea ananatis BRT98 Pantoea piersonii Winslowiella Winslowiella toletana Winslowiella arboricola	2 1 1 1 1 4 7 4 3	5 1 1 1 1 1 2 1	Pantoea ananatis hits Pantoea ananatis LMG 20103 hits Pantoea ananatis 15320 hits Pantoea ananatis AJ13355 hits Pantoea ananatis BRT98 hits Pantoea piersonii hits Winslowiella toletana hits Winslowiella arboricola hits
Pantoea ananatis LMG 20103 Pantoea ananatis 15320 Pantoea ananatis AJ13355 Pantoea ananatis BRT98 Pantoea piersonii Winslowiella Winslowiella toletana Winslowiella arboricola Mixta calida	2 1 1 1 1 4 2 4 3 1	5 1 1 1 1 1 2 1 1 1	Pantoea ananatis hits Pantoea ananatis LMG 20103 hits Pantoea ananatis 15320 hits Pantoea ananatis AJ13355 hits Pantoea ananatis BRT98 hits Pantoea piersonii hits Winslowiella toletana hits Winslowiella arboricola hits Mixta calida hits
Pantoea ananatis LMG 20103 Pantoea ananatis 15320 Pantoea ananatis AJ13355 Pantoea ananatis BRT98 Pantoea piersonii Winslowiella Winslowiella toletana Winslowiella arboricola Mixta calida Hafnia alvei ATCC 51873	2 1 1 1 1 4 7 4 3 1	5 1 1 1 1 1 2 1 1 1 1	Pantoea ananatis hits Pantoea ananatis LMG 20103 hits Pantoea ananatis 15320 hits Pantoea ananatis AJ13355 hits Pantoea ananatis BRT98 hits Pantoea piersonii hits Winslowiella toletana hits Winslowiella arboricola hits Mixta calida hits
Pantoea ananatis LMG 20103 Pantoea ananatis 15320 Pantoea ananatis AJ13355 Pantoea ananatis BRT98 Pantoea piersonii Winslowiella Winslowiella toletana Winslowiella arboricola Mixta calida Hafnia alvei ATCC 51873 Yersiniaceae	2 1 1 1 1 4 7 4 3 1 1 8	5 1 1 1 1 1 2 1 1 1 1 2 2 1 1 2	Pantoea ananatis hits Pantoea ananatis LMG 20103 hits Pantoea ananatis 15320 hits Pantoea ananatis AJ13355 hits Pantoea ananatis BRT98 hits Pantoea piersonii hits Winslowiella toletana hits Winslowiella arboricola hits Mixta calida hits Hafnia alvei ATCC 51873 hits
Pantoea ananatis LMG 20103 Pantoea ananatis 15320 Pantoea ananatis AJ13355 Pantoea ananatis BRT98 Pantoea piersonii Winslowiella Winslowiella toletana Winslowiella arboricola Mixta calida Hafnia alvei ATCC 51873 Yersiniaceae Rouxiella badensis	2 1 1 1 4 7 4 3 1 1 8 6	5 1 1 1 1 1 2 1 1 1 1 2 1 1 1 1	Pantoea ananatis hits Pantoea ananatis LMG 20103 hits Pantoea ananatis 15320 hits Pantoea ananatis AJ13355 hits Pantoea ananatis BRT98 hits Pantoea piersonii hits Winslowiella toletana hits Winslowiella arboricola hits Mixta calida hits Hafnia alvei ATCC 51873 hits
Pantoea ananatis LMG 20103 Pantoea ananatis 15320 Pantoea ananatis AJ13355 Pantoea ananatis BRT98 Pantoea piersonii Winslowiella Winslowiella toletana Winslowiella arboricola Mixta calida Hafnia alvei ATCC 51873 Yersiniaceae Rouxiella badensis Ewingella americana	2 1 1 1 1 4 7 4 3 1 1 8 6	5 1 1 1 1 1 2 1 1 1 2 1 1 1 1 1 1 1 1 1	Pantoea ananatis hits Pantoea ananatis LMG 20103 hits Pantoea ananatis 15320 hits Pantoea ananatis AJ13355 hits Pantoea ananatis BRT98 hits Pantoea piersonii hits Winslowiella toletana hits Winslowiella arboricola hits Mixta calida hits Hafnia alvei ATCC 51873 hits
Pantoea ananatis LMG 20103 Pantoea ananatis 15320 Pantoea ananatis AJ13355 Pantoea ananatis BRT98 Pantoea piersonii Winslowiella Winslowiella toletana Winslowiella arboricola Mixta calida Hafnia alvei ATCC 51873 Yersiniaceae Rouxiella badensis Ewingella americana Pectobacteriaceae	2 1 1 1 1 4 2 4 3 1 1 8 6 2 12	5 1 1 1 1 1 2 1 1 1 1 2 1 1 1 6	Pantoea ananatis hits Pantoea ananatis LMG 20103 hits Pantoea ananatis 15320 hits Pantoea ananatis AJ13355 hits Pantoea ananatis BRT98 hits Pantoea piersonii hits Winslowiella toletana hits Winslowiella arboricola hits Mixta calida hits Hafnia alvei ATCC 51873 hits
Pantoea ananatis LMG 20103 Pantoea ananatis 15320 Pantoea ananatis AJ13355 Pantoea ananatis BRT98 Pantoea piersonii Winslowiella Winslowiella toletana Winslowiella arboricola Mixta calida Hafnia alvei ATCC 51873 Yersiniaceae Rouxiella badensis Ewingella americana Pectobacterium	2 1 1 1 1 4 7 4 3 1 1 8 6 2 12 10	5 1 1 1 1 1 2 1 1 1 2 1 1 1 6 5	Pantoea ananatis hits Pantoea ananatis LMG 20103 hits Pantoea ananatis 15320 hits Pantoea ananatis AJ13355 hits Pantoea ananatis BRT98 hits Pantoea piersonii hits Winslowiella toletana hits Winslowiella arboricola hits Mixta calida hits Hafnia alvei ATCC 51873 hits Rouxiella badensis hits Ewingella americana hits
Pantoea ananatis LMG 20103 Pantoea ananatis 15320 Pantoea ananatis AJ13355 Pantoea ananatis BRT98 Pantoea piersonii Winslowiella Winslowiella toletana Winslowiella arboricola Mixta calida Hafnia alvei ATCC 51873 Yersiniaceae Rouxiella badensis Ewingella americana Pectobacterium Pectobacterium Pectobacterium versatile	2 1 1 1 1 4 7 4 3 1 1 8 6 2 12 10 3	5 1 1 1 1 1 2 1 1 1 2 1 1 1 6 5 1	Pantoea ananatis hits Pantoea ananatis LMG 20103 hits Pantoea ananatis 15320 hits Pantoea ananatis AJ13355 hits Pantoea ananatis BRT98 hits Pantoea piersonii hits Winslowiella toletana hits Winslowiella arboricola hits Mixta calida hits Hafnia alvei ATCC 51873 hits Rouxiella badensis hits Ewingella americana hits
Pantoea ananatis LMG 20103 Pantoea ananatis 15320 Pantoea ananatis AJ13355 Pantoea ananatis BRT98 Pantoea piersonii Winslowiella Winslowiella toletana Winslowiella arboricola Mixta calida Hafnia alvei ATCC 51873 Versiniaceae Rouxiella badensis Ewingella americana Pectobacterium Pectobacterium versatile Pectobacterium colocasium	2 1 1 1 4 7 4 3 1 1 8 6 2 12 10 3 1	5 1 1 1 1 1 2 1 1 1 1 2 1 1 6 5 1 1	Pantoea ananatis hits Pantoea ananatis LMG 20103 hits Pantoea ananatis 15320 hits Pantoea ananatis AJ13355 hits Pantoea ananatis BRT98 hits Pantoea piersonii hits Winslowiella toletana hits Winslowiella arboricola hits Mixta calida hits Hafnia alvei ATCC 51873 hits Rouxiella badensis hits Ewingella americana hits
Pantoea ananatis LMG 20103 Pantoea ananatis 15320 Pantoea ananatis AJ13355 Pantoea ananatis BRT98 Pantoea piersonii Winslowiella Winslowiella toletana Winslowiella arboricola Mixta calida Hafnia alvei ATCC 51873 Yersiniaceae Rouxiella badensis Ewingella americana Pectobacterium Pectobacterium Pectobacterium versatile Pectobacterium colocasium unclassified Pectobacterium	2 1 1 1 4 7 4 3 1 1 8 6 2 12 10 3 1	5 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Pantoea ananatis hits Pantoea ananatis LMG 20103 hits Pantoea ananatis 15320 hits Pantoea ananatis AJ13355 hits Pantoea ananatis BRT98 hits Pantoea piersonii hits Winslowiella toletana hits Winslowiella arboricola hits Mixta calida hits Hafnia alvei ATCC 51873 hits Rouxiella badensis hits Ewingella americana hits Pectobacterium versatile hits Pectobacterium colocasium hits

NCBI Blast:Protein Sequence

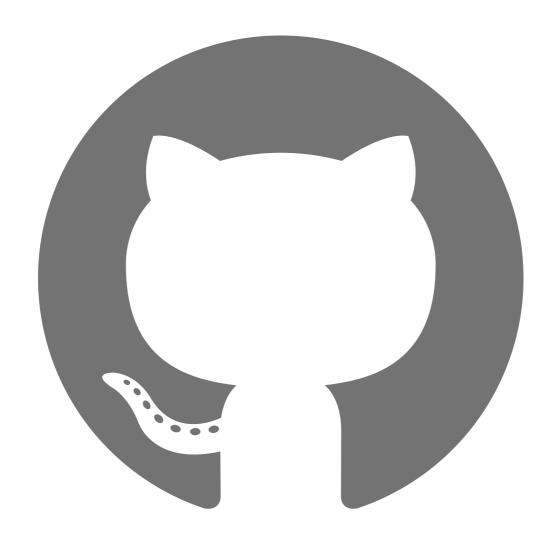
Samsonia erythrinae	<u>2</u>	1	Samsonia erythrinae hits
Acinetobacter baumannii	<u>1</u>	1	Acinetobacter baumannii hits
. Bacteroides heparinolyticus	<u>1</u>	1	Bacteroides heparinolyticus hits
. <u>unidentified bacterial endosymbiont</u>	<u>1</u>	1	unidentified bacterial endosymbiont hits

Top Follow NCBI











Connect with NLM

National Library of Medicine 8600 Rockville Pike Bethesda, MD 20894

Web Policies FOIA HHS Vulnerability Disclosure

Help Accessibility Careers

- NLMNIHHHSUSA.gov