

logo

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|---------------|-------------------|----------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----|---|-----|-----|-----|-----|
| NTDB id 320 | STU RS10340 | WP 002949220.1 | R | R | Y | F | K | T | K | F | R | N | R | I | L | D | Y | I | R | K | Q | E | S | Q | K | R | R | Y | D | K | E | P | Y | E | E | V | G | E | I | S | H | R | I | S | E | G | L | W | L | D | D | Y | L | F | H | E | T | L | R | D | Y | R | N | K | L | S | K | E | K | Q | E | E | L | E | R | L | S | G | E | 139 | | | |
| NTDB id 47 | STER RS00925 | WP 002949220.1 | R | R | Y | F | K | T | K | F | R | N | R | I | L | D | Y | I | R | K | Q | E | S | Q | K | R | R | Y | D | K | E | P | Y | E | E | V | G | E | I | S | H | R | I | S | E | G | L | W | L | D | D | Y | L | F | H | E | T | L | R | D | Y | R | N | K | L | S | K | E | K | Q | E | E | L | E | R | L | S | G | E | 139 | | | |
| NTDB id 450 | SPYM18 RS08475 | WP 011018214.1 | Y | R | Y | F | K | T | K | F | S | S | Y | L | K | D | L | L | R | R | Q | E | S | Q | K | R | Q | F | H | K | L | A | Y | E | E | I | G | E | V | A | H | A | I | P | S | R | G | L | W | L | D | D | Y | V | A | Y | Q | E | V | I | A | S | L | E | N | Q | L | N | S | Q | E | R | M | Q | F | K | A | L | I | R | G | E | 160 |
| NTDB id 449 | SPYM18 RS01395 | WP 011018214.1 | Y | R | Y | F | K | T | K | F | S | S | Y | L | K | D | L | L | R | R | Q | E | S | Q | K | R | Q | F | H | K | L | A | Y | E | E | I | G | E | V | A | H | A | I | P | S | R | G | L | W | L | D | D | Y | V | A | Y | Q | E | V | I | A | S | L | E | N | Q | L | N | S | Q | E | R | M | Q | F | K | A | L | I | R | G | E | 160 |
| NTDB id 442 | SPYM3 RS08515 | WP 011106595.1 | Y | R | Y | F | K | T | K | F | S | S | Y | L | K | D | L | L | R | R | Q | E | S | Q | K | R | Q | F | H | K | L | A | Y | E | E | I | G | E | V | A | H | A | I | P | S | R | G | L | W | L | D | D | Y | V | A | Y | Q | E | V | I | A | S | L | E | N | Q | L | N | S | Q | E | R | M | Q | F | K | A | L | I | R | G | E | 160 |
| NTDB id 441 | SPYM3 RS01385 | WP 011106595.1 | Y | R | Y | F | K | T | K | F | S | S | Y | L | K | D | L | L | R | R | Q | E | S | Q | K | R | Q | F | H | K | L | A | Y | E | E | I | G | E | V | A | H | A | I | P | S | R | G | L | W | L | D | D | Y | V | A | Y | Q | E | V | I | A | S | L | E | N | Q | L | N | S | Q | E | R | M | Q | F | K | A | L | I | R | G | E | 160 |
| NTDB id 448 | SpyM6JRS4 RS07800 | WP 010921894.1 | Y | R | Y | F | K | T | K | F | S | S | Y | L | K | D | L | L | R | R | Q | E | S | Q | K | R | Q | F | H | K | L | A | Y | E | E | I | G | E | V | A | H | A | I | P | S | R | G | L | W | L | D | D | Y | V | A | Y | Q | E | V | I | A | S | L | E | N | Q | L | N | S | Q | E | R | M | Q | F | K | A | L | I | R | G | E | 160 |
| NTDB id 447 | SpyM6JRS4 RS01370 | WP 010921894.1 | Y | R | Y | F | K | T | K | F | S | S | Y | L | K | D | L | L | R | R | Q | E | S | Q | K | R | Q | F | H | K | L | A | Y | E | E | I | G | E | V | A | H | A | I | P | S | R | G | L | W | L | D | D | Y | V | A | Y | Q | E | V | I | A | S | L | E | N | Q | L | N | S | Q | E | R | M | Q | F | K | A | L | I | R | G | E | 160 |
| NTDB id 44 | SMU RS09085 | WP 002263585.1 | Y | I | Y | F | K | T | R | F | S | N | Y | I | K | D | V | L | R | Q | E | S | Q | K | R | R | F | N | R | M | S | Y | E | E | V | G | E | I | H | C | L | S | S | G | M | Q | L | D | E | Y | I | L | F | R | S | L | L | A | Y | K | Q | L | S | T | E | K | Q | E | L | F | E | R | L | V | A | G | E | 138 | | | | | |
| NTDB id 457 | SSUD9 RS00080 | WP 002936602.1 | Y | C | Y | F | K | V | K | F | R | N | R | I | K | D | R | I | R | K | Q | E | S | Q | K | R | K | F | D | R | M | P | H | E | D | I | Y | E | L | S | H | A | I | Q | S | P | G | L | I | N | D | E | L | L | M | R | G | A | L | R | D | Y | R | K | N | L | S | N | D | Q | L | D | K | Y | E | K | L | I | S | G | Q | 136 | |
| NTDB id 461 | GPW51 RS00080 | WP 011921639.1 | Y | C | Y | F | K | V | K | F | R | N | R | I | K | D | R | I | R | K | Q | E | S | Q | K | R | K | F | D | R | M | P | H | E | D | I | Y | E | L | S | H | A | I | Q | S | P | G | L | I | N | D | E | L | L | M | R | G | A | L | R | D | Y | R | K | N | L | S | N | D | Q | L | D | K | Y | E | K | L | I | S | G | Q | 136 | |
| NTDB id 454 | SSU RS00080 | WP 011921639.1 | Y | C | Y | F | K | V | K | F | R | N | R | I | K | D | R | I | R | K | Q | E | S | Q | K | R | K | F | D | R | M | P | H | E | D | I | Y | E | L | S | H | A | I | Q | S | P | G | L | I | N | D | E | L | L | M | R | G | A | L | R | D | Y | R | K | N | L | S | N | D | Q | L | D | K | Y | E | K | L | I | S | G | Q | 136 | |
| NTDB id 424 | SGO RS10430 | WP 012130755.1 | Y | R | Y | F | K | T | K | F | R | N | R | I | H | D | L | I | R | R | Q | E | S | Q | K | R | L | D | R | Q | P | Y | E | E | V | S | E | I | G | H | R | I | R | M | K | E | L | Y | L | D | E | L | V | A | F | R | S | A | M | S | E | Y | R | S | R | L | S | P | E | E | A | K | Q | Y | E | R | L | M | A | D | E | 136 | |
| NTDB id 423 | SGO RS08370 | WP 012130755.1 | Y | R | Y | F | K | T | K | F | R | N | R | I | H | D | L | I | R | R | Q | E | S | Q | K | R | L | D | R | Q | P | Y | E | E | V | S | E | I | G | H | R | I | R | M | K | E | L | Y | L | D | E | L | V | A | F | R | S | A | M | S | E | Y | R | S | R | L | S | P | E | E | A | K | Q | Y | E | R | L | M | A | D | E | 136 | |
| NTDB id 252 | KZH43 RS09050 | WP 000588897.1 | R | K | Y | F | K | T | K | F | R | N | R | I | L | D | Y | I | R | K | Q | E | S | Q | K | R | R | Y | D | K | E | P | Y | E | E | V | G | E | I | S | H | R | I | S | E | G | L | W | L | D | D | Y | L | F | H | E | T | L | R | D | Y | R | N | K | Q | S | K | E | K | Q | E | E | L | E | R | V | L | S | N | E | 135 | | |
| NTDB id 251 | KZH43 RS09050 | WP 000588897.1 | R | K | Y | F | K | T | K | F | R | N | R | I | L | D | Y | I | R | K | Q | E | S | Q | K | R | R | Y | D | K | E | P | Y | E | E | V | G | E | I | S | H | R | I | S | E | G | L | W | L | D | D | Y | L | F | H | E | T | L | R | D | Y | R | N | K | Q | S | K | E | K | Q | E | E | L | E | R | V | L | S | N | E | 135 | | |
| NTDB id 211 | SPD RS09675 | WP 000588897.1 | R | K | Y | F | K | T | K | F | R | N | R | I | L | D | Y | I | R | K | Q | E | S | Q | K | R | R | Y | D | K | E | P | Y | E | E | V | G | E | I | S | H | R | I | S | E | G | L | W | L | D | D | Y | L | F | H | E | T | L | R | D | Y | R | N | K | Q | S | K | E | K | Q | E | E | L | E | R | V | L | S | N | E | 135 | | |
| NTDB id 210 | SPD RS00065 | WP 000588897.1 | R | K | Y | F | K | T | K | F | R | N | R | I | L | D | Y | I | R | K | Q | E | S | Q | K | R | R | Y | D | K | E | P | Y | E | E | V | G | E | I | S | H | R | I | S | E | G | L | W | L | D | D | Y | L | F | H | E | T | L | R | D | Y | R | N | K | Q | S | K | E | K | Q | E | E | L | E | R | V | L | S | N | E | 135 | | |
| NTDB id 177 | SPR RS09210 | WP 000588897.1 | R | K | Y | F | K | T | K | F | R | N | R | I | L | D | Y | I | R | K | Q | E | S | Q | K | R | R | Y | D | K | E | P | Y | E | E | V | G | E | I | S | H | R | I | S | E | G | L | W | L | D | D | Y | L | F | H | E | T | L | R | D | Y | R | N | K | Q | S | K | E | K | Q | E | E | L | E | R | V | L | S | N | E | 135 | | |
| NTDB id 176 | SPR RS00065 | WP 000588897.1 | R | K | Y | F | K | T | K | F | R | N | R | I | L | D | Y | I | R | K | Q | E | S | Q | K | R | R | Y | D | K | E | P | Y | E | E | V | G | E | I | S | H | R | I | S | E | G | L | W | L | D | D | Y | L | F | H | E | T | L | R | D | Y | R | N | K | Q | S | K | E | K | Q | E | E | L | E | R | V | L | S | N | E | 135 | | |
| NTDB id 141 | SP RS10155 | WP 000588925.1 | R | K | Y | F | K | T | K | F | R | N | R | I | L | D | Y | I | R | K | Q | E | S | Q | K | R | R | Y | D | K | E | P | Y | E | E | V | G | E | I | S | H | R | I | S | E | G | L | W | L | D | D | Y | L | F | H | E | T | L | R | D | Y | R | N | K | Q | S | K | E | K | Q | E | E | L | E | R | V | L | S | N | E | 135 | | |
| NTDB id 140 | SP RS00070 | WP 000588925.1 | R | K | Y | F | K | T | K | F | R | N | R | I | L | D | Y | I | R | K | Q | E | S | Q | K | R | R | Y | D | K | E | P | Y | E | E | V | G | E | I | S | H | R | I | S | E | G | L | W | L | D | D | Y | L | F | H | E | T | L | R | D | Y | R | N | K | Q | S | K | E | K | Q | E | E | L | E | R | V | L | S | N | E | 135 | | |
| NTDB id 94256 | RN80 RS00965 | WP 060627198.1 | R | R | Y | F | K | T | K | F | R | N | R | I | L | D | Y | I | R | K | Q | E | S | Q | K | R | R | Y | D | K | E | P | Y | E | E | V | G | E | I | S | H | R | I | S | E | G | L | C | L | D | D | Y | L | F | H | E | T | L | R | D | Y | R | S | K | Q | S | K | D | K | Q | E | E | L | E | R | V | L | R | N | E | 135 | | |
| NTDB id 488 | SM12261 RS00065 | WP 000471939.1 | R | K | Y | F | K | T | K | F | R | N | R | I | L | D | Y | I | R | K | Q | E | S | Q | K | R | R | Y | D | K | E | P | Y | E | E | V | G | E | I | S | H | R | I | S | E | G | M | W | L | D | E | Y | L | F | H | E | T | L | R | D | Y | R | N | K | Q | S | K | D | K | Q | E | E | L | E | R | V | L | R | H | E | 135 | | |
| NTDB id 489 | SM12261 RS01070 | WP 000471940.1 | R | K | Y | F | K | T | K | F | R | N | R | I | L | D | H | I | R | K | Q | E | S | Q | K | R | R | Y | D | K | E | P | Y | E | E | V | G | E | I | S | H | R | I | S | E | G | M | W | L | D | E | Y | L | F | H | E | T | L | R | D | Y | R | N | K | Q | S | K | D | K | Q | E | E | L | E | R | V | L | R | H | E | 135 | | |
| NTDB id 517 | SMSK321 RS10700 | WP 000471945.1 | R | K | Y | F | K | T | K | F | R | N | R | I | L | D | Y | I | R | K | Q | E | S | Q | K | R | R | Y | D | K | E | A | Y | E | E | V | G | E | I | S | H | R | I | G | E | G | L | W | L | D | D | Y | L | F | H | E | T | L | R | D | Y | R | S | K | Q | S | K | D | K | Q | E | E | L | E | R | V | L | R | H | E | 135 | | |
| NTDB id 516 | SMSK321 RS09125 | WP 000471944.1 | R | K | Y | F | K | T | K | F | R | N | R | I | L | D | Y | I | R | K | Q | E | S | Q | K | R | R | Y | D | K | E | S | Y | E | E | V | G | E | I | S | H | R | I | G | E | G | L | W | L | D | E | Y | L | F | H | E | T | L | R | D | Y | R | S | K | | | | | | | | | | | | | | | | | | | |

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|--|----------------------------|-----|
| NTDB id 320 STU RS10340 WP 002949220.1 | CFRGRKKMIRELRFWMVDFDPCNEED | 165 |
| NTDB id 47 STER RS00925 WP 002949220.1 | CFRGRKKMIRELRFWMVDFDPCNEED | 165 |
| NTDB id 450 SPYM18 RS08475 WP 011018214.1 | RFKGRRALLRKISPYFKEFAAQL... | 183 |
| NTDB id 449 SPYM18 RS01395 WP 011018214.1 | RFKGRRALLRKISPYFKEFAAQL... | 183 |
| NTDB id 442 SPYM3 RS08515 WP 011106595.1 | RFKGRRALLRKISPYFKEFAAQL... | 183 |
| NTDB id 441 SPYM3 RS01385 WP 011106595.1 | RFKGRRALLRKISPYFKEFAAQL... | 183 |
| NTDB id 448 SpyM6JRS4 RS07800 WP 010921894.1 | RFKGRRALLRKISPYFKEFAAQL... | 183 |
| NTDB id 447 SpyM6JRS4 RS01370 WP 010921894.1 | RFKGRRALLRKISPYFKEFAAQL... | 183 |
| NTDB id 44 SMU RS09085 WP 002263585.1 | HFLGRQSMLEKDLRKKLSDFKEK... | 160 |
| NTDB id 457 SSUD9 RS00080 WP 002936602.1 | CFNGRREMIRDLIHLLKDFR..... | 156 |
| NTDB id 461 GPW51 RS00080 WP 011921639.1 | CFNGRREMIRDLIHLLKDFR..... | 156 |
| NTDB id 454 SSU RS00080 WP 011921639.1 | CFNGRREMIRDLIHLLKDFR..... | 156 |
| NTDB id 424 SGO RS10430 WP 012130755.1 | RFKGRKAMLEKLSYHLRDFNPRLD.. | 160 |
| NTDB id 423 SGO RS08370 WP 012130755.1 | RFKGRKAMLEKLSYHLRDFNPRLD.. | 160 |
| NTDB id 252 KZH43 RS09050 WP 000588897.1 | RFRGRQVLRDLRIVFKEFTIRTH.. | 159 |
| NTDB id 251 KZH43 RS09050 WP 000588897.1 | RFRGRQVLRDLRIVFKEFTIRTH.. | 159 |
| NTDB id 211 SPD RS09675 WP 000588897.1 | RFRGRQVLRDLRIVFKEFTIRTH.. | 159 |
| NTDB id 210 SPD RS00065 WP 000588897.1 | RFRGRQVLRDLRIVFKEFTIRTH.. | 159 |
| NTDB id 177 SPR RS09210 WP 000588897.1 | RFRGRQVLRDLRIVFKEFTIRTH.. | 159 |
| NTDB id 176 SPR RS00065 WP 000588897.1 | RFRGRQVLRDLRIVFKEFTIRTH.. | 159 |
| NTDB id 141 SP RS10155 WP 000588925.1 | RFRGRQVLRDLRIVFKEFTIRTH.. | 159 |
| NTDB id 140 SP RS00070 WP 000588925.1 | RFRGRQVLRDLRIVFKEFTIRTH.. | 159 |
| NTDB id 94256 RN80 RS00965 WP 060627198.1 | RFRGRQVLRDLRIVFKEFDIRTR.. | 159 |
| NTDB id 488 SM12261 RS00065 WP 000471939.1 | RFRGRQVLRDLRIVFKEFDIRTH.. | 159 |
| NTDB id 489 SM12261 RS01070 WP 000471940.1 | RFRGRQVLRDLRIVFKEFDIRTH.. | 159 |
| NTDB id 517 SMSK321 RS10700 WP 000471945.1 | RFRGRQVLRDLRIVFKEFDIRTQ.. | 159 |
| NTDB id 516 SMSK321 RS09125 WP 000471944.1 | RFRGRQVLRDLRIVFKEFDIRTR.. | 159 |
| consensus | *!*!! *!*!* *!*! | |

non conserved
 similar
 ≥ 50% conserved