	11D	130D	171D
			NCMDADCTEDCY
Streptomyces oceani	RVIPCLDVDA	VLSVAARRTA	NSMDADGTKUGY
Bifidobacterium longum	RVIPCLDVDA	.VLSVDARREK	NSMDADGTKEGF
Streptomyces scabiei	RLIACEDIID	.VQSMQVKRVF	NSIDODGTHEGY
Streptomyces fradiae	LVIPCIDVAG	LGVINSGLA-	NSLDQEGSGAGY
Streptomyces rimosus	LVIPCVDVAA	MGVVNCRRT -	NSVDREGTGQGF
Streptomyces oceani	TVYPAIDV <b>R</b> G	TVALDTRIG-	TDIGROGTLSGP
Serinicoccus marinus_1	TVYPAIDV <b>R</b> G	TVALDTRIG-	TDIGROGTLSGP
Serinicoccus profundi_1	TVYPAIDVRR	TVALDTRIA-	TDIGROGTLGGP
Ornithinimicrobium pekingense_1	ELLAAVDVA <mark>G</mark>	/AVGLDV <mark>TGD</mark> -	ADAARDGRLGGVI
Serinicoccus profundi_2	<u>D</u> LLPAVDVAS	.VVAVDV <mark>R</mark> EG-	ADASR DGRRTGAL
Serinicoccus marinus_2	SLLPAVDVAG	.VVAVDV <mark>RDG</mark> -	ADASR DGRRTGAI
Streptomyces sp CT34	ALFPSVHVAD	GISLPVRVT-	TDVSREGSLYSPI
Streptomyces MUSC 14	DLFPSVHVAG	/GVSLPVRWT-	TDVSREGNLSGPI
Streptomyces D11H	<b>ELFPSVHVAG</b>	GVSLPVH	TDVSREGSLSGPI
Actinokineospora auranticolor	TVFPSIHVAR	.GVSLPVRTV-	TDVTREGTLSGP
Pseudonocardia	ELLPAVDVQD	/AVGLDV <mark>R</mark> GT-	TDVTKDGTLKGPI
Janibacter hoylei	ELLPAVDVRG	:AVGLDVRGT-	TDVAKD6MLAGPI
Actinomadura sp. ATCC 39365	TLLPAVDVRG	/AVELDVWGT-	TDIAPDGTLGGP
Streptomyces coelicolor	ELLPAVDVRD	AVGLDVRGT-	TDIAKDGTLQGP
Corynebacterium striatum	TLLPAVDVVD	AVDLAVRLE-	TDVSKDGTLEGP
Corynebacterium glutamicum	TIFPAVDVVN	- AVDIAVRLE-	TDVSKDGTLSGP
Corynebacterium diphtheriae	TLLPAVDVVD	AVDIAVRNI-	TDVSKDGTLSGP
Ancestro Común de HisA en Bacteria	RIIPAIDLKD	VVGIDARDG-	TDIARDGMMOGP
HisA en saxitoxin	EVIPAIDLLE	IIGIDARNG-	TDINRDGTLOGP
Cylindrospermopsis raciborskii CS50	<b>EVIPAIDLLE</b>	IVGIDARNG-	
Halorubrum tebenquichense	<b>EVIPAVDVQD</b>	VVSLDAKDG-	
Halonotius sp J07HN6	<b>EVIPAVDVQD</b>		
Thermococcus sp JCM 11816	DVYPAIDLMG	TVSLDVKDG-	TSIERDGTLTGV