

**S1 Table.** Homologous proteins of TxeA.

Description	Query cover	E value	Max ident	Accession
glyoxalase/bleomycin resistance protein/dioxygenase [ <i>Opitutaceae bacterium</i> TAV5]	96%	3e-59	66%	ZP_09595956.1
lactoylglutathionelyase-like lyase [ <i>Opitutaceae bacterium</i> TAV1]	93%	3e-56	65%	ZP_10268962.1
lactoylglutathionelyase-like lyase [ <i>Microvirga sp.</i> WSM3557]	97%	3e-52	58%	ZP_10181559.1
glyoxalase/bleomycin resistance protein/dioxygenase [ <i>CandidatusSolibacterusitatus</i> Ellin6076]	97%	3e-51	55%	YP_826267.1
glyoxalase/bleomycin resistance protein/dioxygenase [ <i>Rhodopseudomonaspalustris</i> DX-1]	95%	2e-49	59%	YP_004109357.1
lactoylglutathionelyase [ <i>Rhodopseudomonaspalustris</i> CGA009]	93%	6e-49	59%	NP_947811.1