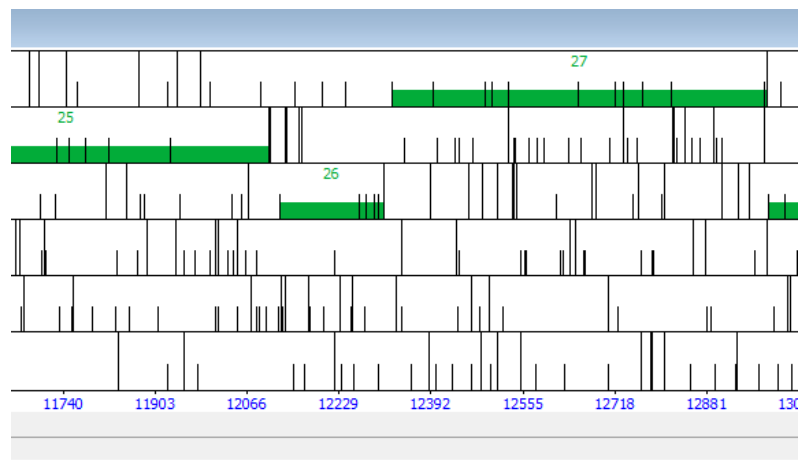


>WheeHeim\_12322-12990

MALSDAQIAGAAKAAGFSGSALAKAVAIALAESSGNPNNAHNAVPPDNSYGLWQINMLGSMGPARRKQFGLKSNDL  
FNPTTNAKAAAYAINSGGKNFGPWSTYTSGAYLRYMSRANKAAGNPDSSVPGSSNGGVEQAGLTDVFSWPGEIMDF  
EFITDPNTWLRAGMLIGGAVLVGVALVQISGAGSQIGQVANAAVDFVPPGGAIKKAAGSAAKAAKAVSZ

This is gp27 below.



From PECAAN, best hits in BlastP, HHPred, and CCD are to lytic transglycosylase:

SIF-BLAST: „lytic transglycosylase [Saccharopolyspora spinosa],,WP\_010693237,36.0,8.62218E-49 SIF-

HHPRED: Lytic transglycosylase, LtgA protein; Complex, lytic transglycosylase, LtgA, transferase; HET:

SO4; 1.4A {Neisseria meningitidis serogroup B (strain MC58)},,,4YIM\_B,67.5676,98.7

Evidence	Hit	Description	Probability	% Coverage	Target From	Target To	Query From	Query To	E-value
<input checked="" type="checkbox"/>	4YIM_B	Lytic transglycosylase, LtgA protein; Complex, lytic transglycosylase, LtgA, transferase; HET: SO4; 1.4A {Neisseria meningitidis serogroup B (strain MC58)}	98.7	67.5676	427	558	5	155	2.5e-11
<input type="checkbox"/>	1GD6_A	THE BOMBYX MORI LYSOZYME; LYSOZYME, 1,4-BETA-N-ACETYLMURAMIDASE, BMLZ, HYDROLASE; 2.5A {Bombyx mori} SCOP: d.2.1.2	98.6	45.4955	2	106	2	103	7.2e-11
<input type="checkbox"/>	4OZ9_A	Membrane-bound lytic murein transglycosylase F; Lytic transglycosylase, glycosyltransferase, ABC substrate; 2.24A {Pseudomonas aeruginosa}	98.6	55.8559	260	378	5	129	8.6e-11
<input type="checkbox"/>	4C5F_A	MEMBRANE-BOUND LYTIC MUREIN TRANSGLYCOSYLASE C; LYASE; 2.34A {ESCHERICHIA COLI}	98.6	50	175	293	5	116	1.2e-10
<input type="checkbox"/>	4CFP_A	MEMBRANE-BOUND LYTIC MUREIN TRANSGLYCOSYLASE C; LYASE; HET: AMV, CIT, P6G, AMU, NAG; 2.15A {ESCHERICHIA COLI}	98.6	68.9189	175	341	5	158	1.2e-10

HHPred External:

44P0G\_A, MEMBRANE-BOUND LYTIC MUREIN TRANSGLYCOSYLASE F; Lytic transglycosylase, glycosyltransferase, ABC substrate; HET: BLG, AMU, NAG; 1.65A {Pseudomonas aeruginosa}, Prob=99.37, Eval=9.3e-15, Coverage=30%

I tried extending it over 26 (there is no useful GMWeb on this phage), but it didn't really change the HHPred results.

The most conservative call would be 'GLYCOSYLTRANSFERASE.'

But note that in the previous post I have asked for an opinion on 25, LysM. What is often ID'd as Lysin A.

Could this be Lysin A and Lysin B?

Thoughts?