**Table S3.** Bacteria with O-antigen containing perosamine residues with *N*-acyl substitutions other than *N*-formyl.

|  |  |  |  |
| --- | --- | --- | --- |
|  | Perosamine characteristics | Additional sugars1 | References |
| Bacteria | Configuration | *N*-acyl Group |  Linkage(s) [proportion] |
| *Vibrio cholerae* O76 | L | S-(+)-2-hydroxypropionyl  | α (1,2)  | - | (Kondo et al. 1996) |
| *V. cholerae* O1 Ogawa | D | 3-deoxy-L-glycero-tetronyl | α (1,2)  | - | (Isshiki et al. 1995) |
| *V. cholerae* 1875  | D | 3-hydroxypropionyl | α (1,2)  | - | (Kondo et al. 1993) |
| *V. cholerae* Hakata  | D | acetyl | α (1,2)  | - | (Isshiki et al. 1992) |
| *V. cholerae* O144  | L | *R*-(-)-2-hydroxypropionyl | α (1,2)  | - | (Sano et al. 1996) |
| *Escherichia coli* O157:H7  | D | acetyl | α (1,2), α (1,3)2 | +++ | (Perry and Bundle 1990) |
| *E. hermannii*3 | D | acetyl | α (1,2), α (1,3) [3:2 o 2:3]  | - |  (Perry and Bundle 1990) |
| *Salmonella* group N  | D | acetyl | α (1,2), α (1,3)4 | +++ | (Perry and Bundle 1990) |
| *Stenotrophomonas maltophila* | D | acetyl | α (1,2) α (1,3) [1:1] | + | (Perry and Bundle 1990) |
| *Citrobacter gillenii* O9a,9b | D | acetyl | α (1,2) | - | (Lipiński et al. 2002) |
| *Citrobacter youngae* O9 | D | acetyl | α (1,2), α (1,3), β (1,3) | - |  (Ovchinnikova et al. 2004) |
| *Caulobacter crescentus*5 | Unknown  | acetyl | Unknown  | Possibly  | (Awram and Smit 2001) |

1 +, presence; -, absence.

2 No perosamine - perosamine linkages.

3 Only in some serotypes [NRCC strain, but no ATCC strains (Perry and Bundle, 1990; Sano *et al.*, 1996)].

4 No perosamine - perosamine linkages.

5 Genetic evidence; no structural studies.

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