

32071 = #743

from 2720 →
2720 #183/1072 nroA1 pabA1 yA2 + + wA3 + + + + + + + + (630 rec)
M 2628 + + + biA1 AcrA1 + galA1 ActA1 pyroA4 lysB5 sB3 oliC2 malA1 fWA2
↑^{1.6} see #618 //
2u 2349 M 2595 / M 2623

Cross 2337 see #618

2343 / 2550 // #477 / 2240

see below

2306 (Alcohol paper)

2561 | biA1; wA3; galA1 ActA1; nicA2; sB3; malA1
(from cross 2323)
2337X 2202 | SulA1 pabA1; ssaA1; sB3; oliC2; chaA1
from (1986.3.25)

from 2478 see #745 / 24861 / 24681 ssaA
↑
2480

2343

→ 2550 (2306.9.15) fraB37 suA1 adE20 + nroA1 pabA1 yA2 adE20 AcrA1 + galA1 + methG1 + nicA2 + sB3 oliC2 + fWA2 +
#477/2240 (2125.4.12) + + SulA1 + + + adE20 AcrA1 wA3 + ActA1 + pyroA4 + lysB5 sB3 tchoA1 + chaA1

(2480.3.7)
2306 24681 fraB37 suA1 adE20 + nroA1 pabA1 yA2 adE20 + AcrA1 + + ActA1 + + pyroA4 ssaA1 + facA303 + sB3 oliC2 + fWA2 + +
#745 24861 + + SulA1 + anA1 + + + biA1 + wA2 cuxE16 tgalA1 methG1 + + nicA2 + sB3 + choA1 + nroB2 chaA1
from 2478 see #745

2480 2442 (2476.2.7) fraB37 suA1 adE20 nroA1 + pabA1 yA2 adE20 + AcrA1 + + pyroA4 ssaA1 facA303 + oliC2 + chaA1
2438 (2479.3.21) + + + anA1 + + adE20 biA1 AcrA1 wA2 ActA1 + ssaA1 facA303 sB3 oliC2 fWA2 +

2479 2419 (2474.4.7) + anA1 adE20 biA1 AcrA1 wA3 ActA1 ssaA1 pyroA4 + sB3 oliC2 + fWA2
2417 (2474.2.11) SulA1 + + + AcrA1 + ActA1 ssaA1 + facA303 sB3 + choA1 fWA2

2476 2415 (2474.2.22) + + + anA1 + + adE20 biA1 AcrA1 pyroA4 ssaA1 facA303 sB3 oliC2 fWA2 +
2365 (2461.1.10) fraB37 suA1 adE20 nroA1 + pabA1 yA2 adE20 + AcrA1 + + + + + + + + chaA1
#11 X 22571 (1950.14.12) see #643, 507, 452

2474 2201 (1987.8.24) → see 444, 455
SulA1 + + + AcrA1 wA3 + ssaA1 pyroA4 facA303 facA1 + + choA1 + nroB2 chaA1
→ 23661 (2471.1.3) + anA1 adE20 biA1 AcrA1 + ActA1 ssaA1 + + + sB3 oliC2 + fWA2 + +

2471 2202 (1986.3.25) → see #473
SulA1 + pabA1 + + + + ssaA1 sB3 oliC2 + chaA1
#514R-2356 (2216.13.25) + anA1 + adE20 biA1 AcrA1 ActA1 + sB3 + fWA2 +