

ACCUMULATION IN CPM (Experiments 261-264-265-266-269)

	GAL ₁	GAL ₂	GAL ₃ (Trypt.)	GAL ₄	GAL ₅ (Trypt.)	GAL ₆	GAL ₇	GAL ₈	GAL ₉ (Trypt.)	GAL ₁₆
<u>Galactose Accumulation:</u> (Duplicate values correspond to different exp.)										
Non-Induced	559-616	252-273	1952	436	3820	480	56	113	186	7227
Gal Induced	4193-3998	456-462	3657	3121	2907	3121	142	507	579	
<u>β-Methyl-Galactoside Accumulation:</u> (Accumulation in W2244 = 1200 CPM, in W3110 Gal ⁺ = 340 CPM)										
Non-Induced	15-0	17-25	126	0	110	0	0	15	37	266
Gal Induced	1517-3823	548-305	654	660	223	374	140	345	341	
<u>β-Galactosidase in Induced Cells:</u> (OD ₄₂₀ (Beckman) x 100/min; ml culture) Enzyme in non-induced wild K ₁₂ = 0.3										
C ₆ H ₆ activated cells										
At 10 ⁻³ M OMPG	40.3	63.7	5.1	17.7	0.1	11.6	27.8	74	57.3	
Crypticity Factor	$\left(\frac{\beta\text{-galactosidase in C}_6\text{H}_6\text{-cells}}{\beta\text{-galactosidase in intact cells}} \right)$									
	13	13	20	13	1.6	12	12	15	13	

Cells were grown in Davis' media with 0.4% glycerol. Induced cells were grown in the same medium plus 0.1% galactose for 12 hours. Accumulation assay: 0.8 mg cells in 3 ml medium incubated for 15 min at 37° with 50 µg/ml chloramphenicol. Substrate at 1 x 10⁻⁵ M (CPM/ml = 3900). Accumulations of less than 20 CPM are probably not significant. Accumulation of β -Methyl-Galactoside in induced cells with large amounts of β -Galactosidase is meaningless because of hydrolysis.