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The material balanced equation for concentration of mRNA m_i and translated protein p_i is given by the equations below

$\dot{m} = r_{X,i} U_i - (\mu + \theta_{m,i}) m_i + \lambda_i \qquad where\, i = 1, 2, ..., N$
$\dot{p} = r_{L,i} W_i - (\mu + \theta_{p,i}) p_i$

The term 'μ' is an intracellular dilution term where,
$\mu = \beta^{-1} \dot{\beta}$
Since this is a cell free system with a constant working volume V_L, $\dot{\beta}$ will be equal to zero. Consequently, μ will be zero. Hence the above equations will become

$\dot{m} = r_{X,i} U_i - \theta_{m,i} m_i + \lambda_i \qquad where\, i = 1, 2, ..., N$
$\dot{p} = r_{L,i} W_i - \theta_{p,i} p_i$