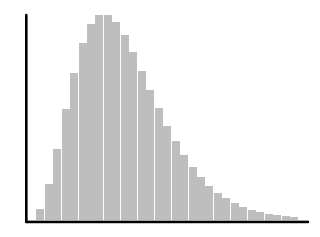


$$f(x) = f_{Norm}(\log_2(x); \log_2(TE_{CDS,i}), 2SE_{\log_2(TE_{CDS,i})}^2)$$

Prior distribution of  $mRNA_{uORF_i}(K_{im})$



$$g(K_{im}) = f_{NB}(K_{im}; \mu_{im}, \varphi_M(\mu_{im}))$$

$$P_m(R_0) = \int f(x) \sum_{K_{im} \geq 0} g(K_{im}) f_{NB}(0; xK_{im}, \varphi_R(xK_{im})) dx$$

$mRNA_{uORF_i} = 100$ $mRNA_{CDS,i} = 1000$ $RPF_{uORF_i} = 0$ $RPF_{CDS,i} = 2000$ $\mu_{im} = 100$ $TE_{CDS,i} = 2$	$SE_{\log_2(TE_{CDS})} = 0.156$ $\varphi_M(\mu_{im}) = 0.035$	$P_m(R_0) = 3.6 \times 10^{-12}$
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