

TABLE I
Amounts of initiation factor proteins in exponentially growing HeLa cells

Initiation factor protein	Input radio-activity ^a	Cytoplasmic protein molecules ^b	Molecules/cell ^c ($\times 10^{-6}$)	Factor/ribosome ^d
	%	%		
2 α	0.089	0.109 \pm 0.02	2.66	0.81
2 β^e	0.117	0.106 \pm 0.03	2.59	0.78
2 γ	0.073	0.066 \pm 0.02	1.61	0.49
3p24	0.107	0.210 \pm 0.06	5.12	1.55
3p36	0.072	0.094 \pm 0.02	2.29	0.69
3p40	0.040	0.047 \pm 0.01	1.14	0.35
3p44	0.122	0.130 \pm 0.03	3.17	0.96
3p47	0.072	0.072 \pm 0.02	1.76	0.53
4A	0.375	0.400 \pm 0.10	9.76	2.96
4B ^f	0.099	0.058 \pm 0.02	1.42	0.43

^a Values are averages from four to eight independent quantitations. Radioactivity/spot, calculated as described under "Experimental Procedures," was corrected for recovery and background.

^b This conversion was achieved by multiplying the "per cent input" value by a molecular weight factor, which was calculated by dividing the molecular weight of the average size HeLa cell protein, 47,000 (32), by the individual factor's molecular weight.

^c Calculated using the average cytoplasmic protein content of an exponentially growing HeLa cell as 150 μ g.

^d The value for ribosomes/cell, calculated as described under "Experimental Procedures," was 3.3×10^6 .

^e Only one form of eIF-2 β was quantifiable in the lysates examined.

^f A spot-free gel region encompassing the eIF-4B region was cut and counted, as described in the text.