

TABLE I

Mean sizes of peptides generated and number of cuts made in a single polypeptide chain by proteasomes

Mean sizes were calculated from the distributions of products of rabbit muscle proteasomes (Fig. 6) and *Thermoplasma* proteasomes (from Ref. 30). The values for mean sizes are averages \pm ranges in two experiments. The number of cuts was calculated as protein length divided by mean size minus one (30).

| Substrate (number of residues) | Mean number of residues in peptides generated | | | Cuts per polypeptide by rabbit muscle | |
|--------------------------------|-----------------------------------------------|---------------|---------------|---------------------------------------|------|
| | <i>Thermoplasma</i> (20 S) | Rabbit muscle | | 20 S | 26 S |
| | | 20 S | 26 S | | |
| IGF (70) | 7.0 \pm 0.2 | 8.3 \pm 0.8 | 6.5 \pm 0.2 | 7 | 8 |
| Casein (209) | 11.2 \pm 0.2 | 8.9 \pm 1.0 | 9.0 \pm 0.6 | 22 | 22 |
| Ovalbumin (385) | ND* | 9.5 \pm 0.5 | 7.4 \pm 0.0 | 40 | 51 |

* Not determined.