In conclusion, the substitution of glutamine for arginine-109 (conserved in all 16 known LDHs and all 4 known MDHs) has changed the properties of the enzyme in a limited but mechanistically interpretable way. We suggest that the binding of the anionic pyruvate at the active site neutralizes some of the positive charge in this region, triggering loop closure and exploiting the favourable hydrophobic contacts^{2,16} made between the loop and the body of the protein. This brings arginine 109 close to the substrate carbonyl (an example of a substrate-induced conformational change). Our data show that the relative enzyme-substrate ground state stabilization of the arginine 109 containing complex, over that containing glutamine, is 1.6–1.9 kcal, while the relative transition state stabilization is 4.2 kcal. In the ground state the polarization of the carbonyl bond of the substrate appears to be enhanced by arginine 109 (Fig. 3*b*). The greater effect of the loss of arginine 109 on the transition state stability is consistent with the carbonyl bond becoming more polarized as a negative charge develops on the carbonyl oxygen when C-2 goes from sp^2 to sp^3 hybridization.

We thank Professor M. Buehner for his discussions of the crystallographic structure of *L. casei* LDH and the SERC for a project grant (protein engineering), personal fellowship (A.R.C.) and studentship (D.B.W.).

Isolation of cDNA clones encoding the 20K non-glycosylated polypeptide chain of the human T-cell receptor/T3 complex

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Nature **321**, 431-434 (1986).

THREE sequencing errors have been found in the human T3- ϵ nucleotide sequence published in Fig. 3b. These errors have been corrected in the sequence shown below at the positions indicated by vertical arrows. The putative transmembrane region is underlined. The predicted amino acid sequence ends after residue 185 instead of the reported residue 211.

h

gtagctctgtctgcctccgcactcttagtaagtaacagctccatgaaacaaag	1
ATC GCA	2
N Q	3
TCG GGC ACT CAC TGG AAG GTA GTT CTG GGC CTC TTC TTA TCA GTT GGC GTT TGG GGC	4
S G T H M R V L G L G C L C L S V G V W G C G	5
GAT GGT AAT GAA GAA ATA GGT GGT ATT ACA CAG ACA CCA TAT AAA GTG TTC ATC TTC TGT	6
D G M R F E N G G I T T Q T P Y K V S I E G G	7
1	8
ACA GTA ATA TTT CTA TGC CTT GAT CAG TAT GTC GCT GAA ATA CTA TGG CAA CAC	9
T V I L I L T C A C C T Y F G S E I L M W Q N	10
21	11
GAT AAA AAG ATA GGC GGT GAT GAC GAT AAA AAG GGC AGT GAT GGC GAT CAC	12
K N I G G D E D R E N I G S G D E G D N L	13
41	14
TCA CTC AAG GAA TTT TCA ETC GAG CAA ATG GGT TAT TAT GTC TGC TCC CCG GAA	15
S L K E F E S E L E Q S G Y Y V C Y P R R A G	16
61	17
ACC AAA CCA GAA GAT GGC AAG TTT TAT CTC TAC TGC ACG GCA AGA GTG TGT GAG AAC	18
K F E D A H N F V L Y L E R A R N V C E C	19
81	20
ATG GAG ATG ATG GAT GTG ATG ATG GTC GGC ACA ATG GTC ATG ATG GAC ATC ATC ATC	21
H E R D V M S V A T I V I V I D I C I C T C	22
101	23
GGC TTC CTC GTG CTC GTG GTT TAC TAC TGC AAG AAT ACA AAG GGC AAG GGC AAG GTC	24
G L L L L L V V Y V M S E K M R R E A R A R P	25
121	26
ACA TGA GGA GCG GAT GAG GCG AAG CAA AGG GCA AAG AAG CCA CCA CCA CCA	27
T R G A G G A G G G G R Q H K R K R R P F	28
141	29
GTG CCC AAG CAC GAT TAT GAG CCA ATC GCG AAA GGC CAG GCG CAG CTG TAT TGT GGC	30
V P N P D Y Y F R P I R X G Q R D L Y S Y	31
161	32
AAT CAC AAG GCG ATC TCA cactctctggagacactgcctcccggtggccagctctcctct	33
N Q R E I *	34
181	35
ccagctccacccctggactcctctgtctctggagctgctctggagccaccagagagagagagag	36
780	37
tctctcagctcctgtaggacctcgccgacctcagctctgacacccagctcctcctcctcctc	38
840	39
cctctctctgtgtgtaacccctctaaattctgtctctctctctctctctctctctctctctctct	39
900	40
cagctactcaacacctcaccagctgctgctgctcctctctggagcattctctgtctgtctct	41
960	42
actcct	42
1020	43
tgtcct	43
1080	44
ctctggagct	44
1140	45
tgagctcagct	45
1200	46
ct	46
1260	47
atct	47
1320	48

Received 6 May; accepted 3 November 1986.

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Corrigenda

A complimentary DNA clone for a macrophage-lymphocyte Fc receptor

Victoria A. Lewis, Terry Koch, Helen Plutner & Ira Mellman
Nature 324, 372-375 (1986).

A LATE correction to Fig. 1b in this letter was omitted. The nucleotide numbering for pFcRab should read 805–1421, not 805–1385 as shown. The figure appears correctly on reprints. The insert is 6/6 base pairs, not 580 as in paragraph 2 of the letter.

Protein kinase C activation induces conductance changes in *Hermissenda* photoreceptors like those seen in associative learning

J. Farley & S. Auerbach

Nature 319, 220-223 (1986).

PANEL *c* in Fig. 3 of this letter was incorrectly drawn. With the ordinate scale corrected the figure reads: