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.

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Corrigenda

A complimentary DNA clone for a macrophage-lymphocyte Fc receptor

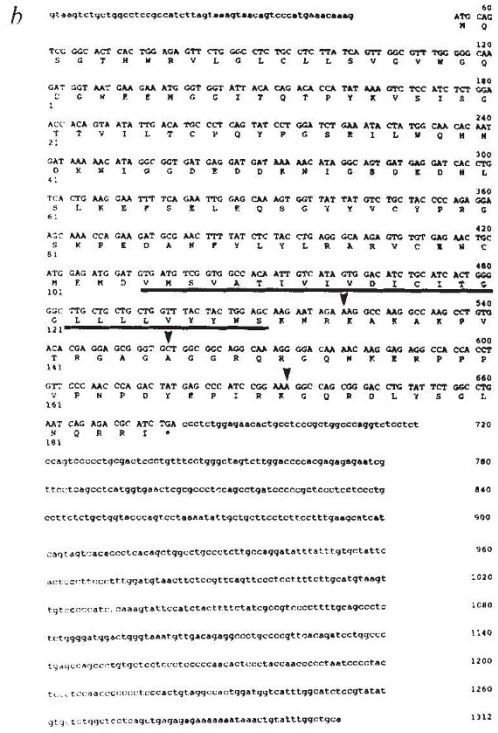
Victoria A. Lewis, Terry Koch, Helen Plutner & Ira Mellman
Nature **324**, 372-375 (1986).

A LATE correction to Fig. 1*b* 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 of 6/6 base pairs, not 580 as in paragraph 2 of the letter.

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

Daniel P. Gold, Jennifer M. Puck, Carolyn L. Pettey, Mildred Cho, John Coligan, James N. Woody & Cox Terhorst
Nature **321**, 431-434 (1986).

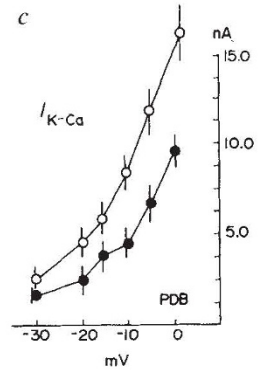
THREE sequencing errors have been found in the human T3-ε nucleotide sequence published in Fig. 3*b*. These errors have been corrected in the sequence shown below at the positions indicated by vertical arrows. The putative transmembrane region is underlined. The predicted amino acid sequence ends after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



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:



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