From [redacted] **Thu Sep 2 15:36:51 1993**
From: Donal Hickey <[redacted]>
To: Michael Ashburner <[redacted]>
Subject: trypsin genes
Date: Thu, 02 Sep 93 10:21:45 EDT

Dear Michael,

Davis et al. described four trypsin genes that form a tighly-linked cluster. They labelled them alpha, beta, gamma and delta. They sequenced the alpha gene. We were interested in the possibility of gene conversion between these multiple gene copies, so we sequenced a chromosomal segment that included the alpha and beta genes. Our third gene, epsilon was a surprise: it lies between the alpha and beta of Davis et al. It hadn't been discovered by cross-hybridization because it is more than 30% diverged from alpha and beta. We are writing this up for MBE and I will send you a copy of the manuscript.

More recently we have extended the sequencing of this region and we now have a total of eight tryspin coding sequences within a 13kb genomic fragment (these eight genes include the four described by Davis et al). We need to do some more sequence verification before submitting these new data to GenBank.

Best Regards,

Donal Hickey.

G 110 512
NAR 13: 6605

*a Try → Tryp α
*z 03863
*e Trypsin-α
*x Davis, 1985, Genetics 110: s12
*x Davis, Riddell, Higgins, Holden and White, 1985, Nucleic Acids Res. 13: 6605-6619
*b 2-[60].
*c Placed in 47D-47F.
M96372
*F serine-protease
*g X02989 [complete]
*d trypsin
*f EC 3.4.21.4
*J Serine proteases, trypsin family, histidine active site == PS00134
*J Serine proteases, trypsin family, serine active site == PS00135
*m PIR/A23493 [precursor]
*m SWP/P04814
*p Structural gene for enzyme trypsin.

*a Tryβ
*x Davis —·

*a Tryδ
*x Davis ...

*a Tryδ
*x Davis ---

Same *b c d f J — M96372

*a Tryβ ε
Same b c d f J
M96372