

Topic # 11

From Gene to Protein

(Campbell and Reece p. 309-331)

I. Introduction

A. Overview

B. RNA review.

C. Types of RNA.

1. mRNA.

2. rRNA.

3. tRNA.

II. Transcription.

A. RNA polymerase.

B. Promoter

C. Start signal

D. mRNA produced.

- E. Terminator

- F. RNA processing (eukaryotic cells) or splicing.
 - 1. Introns.
 - 2. Exons.

III. Translation.

- A. mRNA codes for 20 amino acids.
- B. Codon.

C. rRNA and ribosomes.

D. tRNA.

E. Protein synthesis

IV. Key Terms.

codon
exon
intron
messenger RNA
one gene - one polypeptide
hypothesis
promoter
protein synthesis
ribosomal RNA
ribosomes
RNA
RNA polymerase
RNA processing
Start signal
terminator
transcription
transfer RNA
translation
uracil