

Comparison between Transcription and Translation

	Transcription	Translation
Where does this process occur in a eukaryotic cell?	<i>nucleus</i>	<i>cytoplasm</i>
What is the enzyme that carries out this process?	<i>RNA polymerase</i>	<i>Ribosome</i>
What is the template that is read during this process?	<i>DNA</i>	<i>RNA</i>
In what direction is the template read?	<i>3' → 5'</i>	<i>5' → 3'</i>
What is the start signal/sequence for this process?	<i>promoter</i>	<i>Start codon</i>
What is the polymer that is formed?	<i>RNA</i>	<i>polypeptide</i>
What monomer is used to form this polymer?	<i>ribonucleotides</i>	<i>Amino acids</i>
What type of bond is formed between monomers?	<i>phosphodiester</i>	<i>peptide</i>
In what direction is the new polymer formed?	<i>5' → 3'</i>	<i>N → C</i> <i>Amino to carboxyl</i>
What is the stop signal/sequence for this process?	<i>Transcription Terminator</i>	<i>Stop codon</i>