

**Anterior Pituitary Hormones (All are "Tropic" Hormones):**

Endocrine Cell	Hormone	Chemical Structure (All are peptides or proteins)	Effect: Target Tissue (and target hormone)
<p><u>Basophils</u></p> <p>gonadotrophs</p>	<p>Follicle Stimulating Hormone (FSH)</p> <hr/> <p>Luteinizing Hormone (LH)</p>	<p>200-220 amino acid glycoprotein. 2 subunits (alpha and beta). Alpha subunit identical for each.</p>	<p>female: follicles in ovary (stimulate <b>estrogen</b> production)</p> <p>male: spermatogenesis in testes</p>
thyrotrophs	<p>Thyrotropin or Thyroid Stimulating Hormone (TSH)</p>		<p>female: corpora lutea in ovary (stimulate <b>progesterone</b> production)</p> <p>male: Leydig cells in testes (stimulate <b>testosterone</b> production)</p>
			<p>thyroid gland (stimulate <b>thyroid hormone</b> production)</p>
<p><u>Acidophils</u></p> <p>somatotrophs</p>	<p>Growth Hormone (GH)</p>	<p>190-220 amino acids, closely related in structure</p>	<p>throughout body—supports cellular growth</p>
lactotrophs	<p>Prolactin (PrI)</p>		<p>mammary gland—supports milk production</p>
<p><u>Weak Basophil/Chromatophobes</u></p> <p>corticotrophs</p>	<p>Adrenocorticotropic Hormone (ACTH)</p> <hr/> <p>beta-endorphin</p>	<p>various peptides cleaved from ProOpioMelanoCortin (POMC) prohormone</p>	<p>adrenal cortex (stimulate <b>glucocorticoid</b> production)</p>
			<p>throughout body—endogenous morphine like substance (analgesic)</p>
melanotrophs	<p>Melanocyte Stimulating Hormone (MSH)</p>		<p>melanocytes—regulate pigment production (role in humans unclear)</p>