

# EMBRYOLOGY

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There are two distinct functional units in the adrenal gland: cortex and medulla. The cortex is derived from the mesoderm. At about the fifth week of life the fetal cortex develops; this is subsequently surrounded by a second wave of mesothelial cells that will eventually form the definitive cortex. After birth the fetal cortex regresses except for its outermost layer, which differentiates into the reticular zone. The adrenal medulla is derived from ectodermal chromaffin cells that are believed to have migrated from the neural crest. The adrenal cortex represents 90% of the gland and is arranged in a zonal configuration. The outer zona glomerulosa contains small, compact cells loosely arranged in cords. The central zona fasciculata can be identified by larger, compact and pigmented cells characterise the inner zona reticularis. The adrenal medulla is the inner core that consists of a thin layer of large chromaffin cells (stain yellow with chromium), which synthesise, store and secrete catecholamines.

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