

Chordata

Some important general characteristics:

1. *Post anal tail.*
2. *Closed circulatory system. (exception: Tunicata)*
3. *Paired gill slits on lateral sides of pharynx.*
4. *Notochord at any stage.*
(Present throughout the life only in cephalochordates and agnatha)
5. *Dorsal hollow nerve cord.*

A: Acraniata or Protochordata

1. Urochordata (*Uro means tail*)

- also called *tunicata.*
(*tunic of cellulose like tunicin present in adult body*)
- exclusively *marine.*
- Ascidian tadpole *undergoes retrogressive metamorphosis and loses the notochord present in its tail.*
- Vanadocytes *present for aiding respiration.*
(*exception: Herdmania.*)
(*Green color of blood is due to vanadium*)
- Stigmata *formed by remnants of larval gill slits perforate the pharynx, and open into atrium.*
- Respiration thru gill slits and tunic.*
- Glandular excretion and thru neural glands.
- Open circulatory system.

Ex- Herdmania(Sea squirt), Ascidia, Salpa, Pyrosoma.

2. Cephalochordata (*Notochord persists throughout life*)

- Closed circulatory system.*
- Wheel organ *in vestibule for setting up water currents.*
- Excretion by Protonephridia (Solenocytes).*

Ex- Branchiostoma (Amphioxus) (Lancelet)