

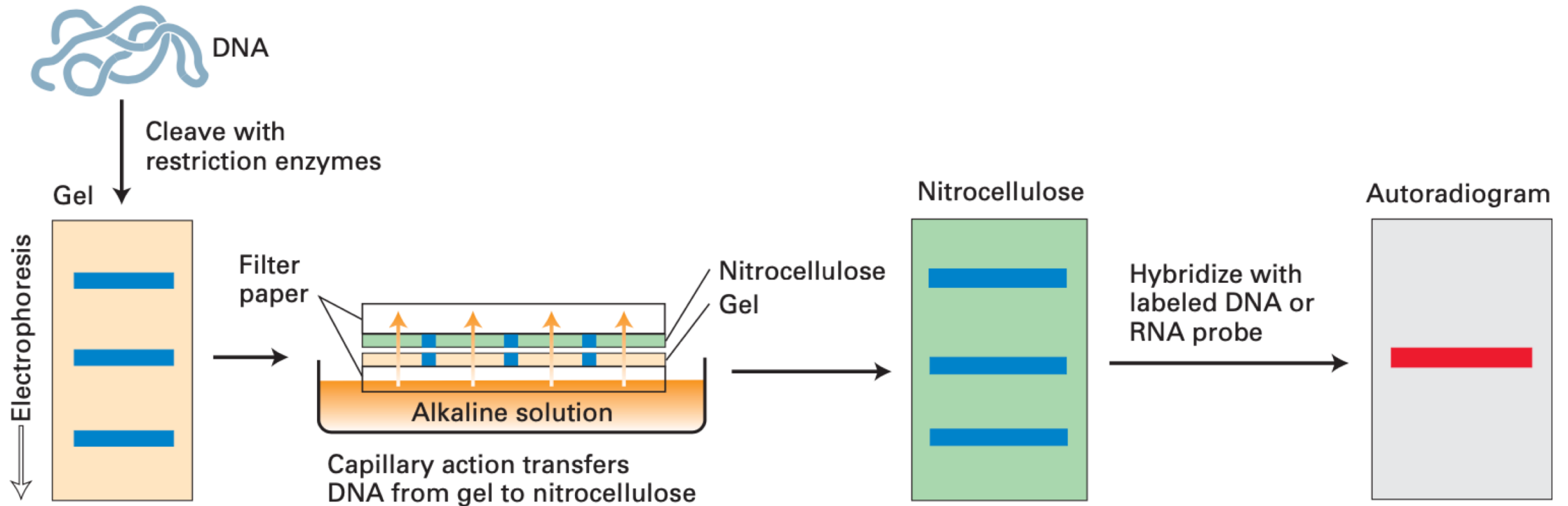
Western
Southern
Northern
Blotting

Which is what?

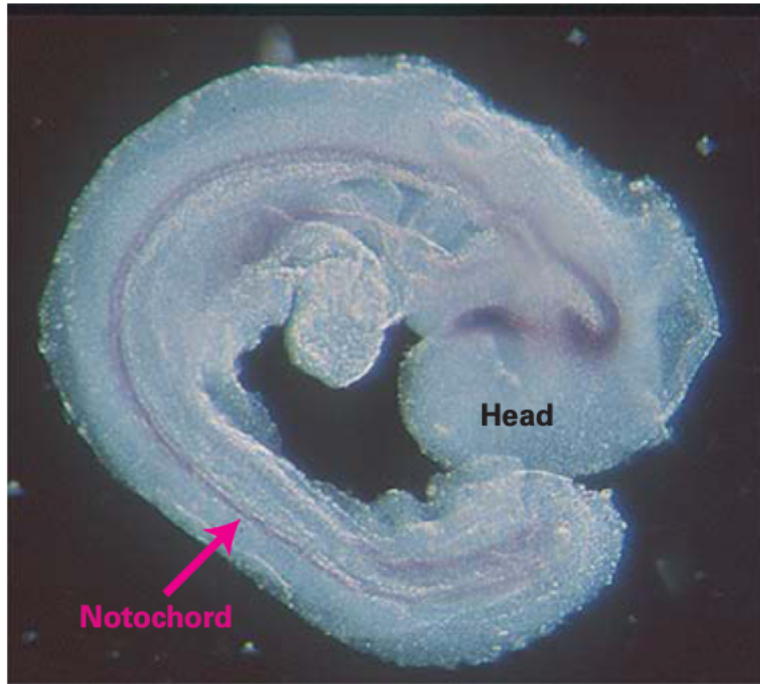
- Transfer of proteins to a membrane is referred to as **Western transfer**.
- Transfer of DNA bands to a membrane is referred to as **Southern transfer**.
- Transfer of RNA bands to a membrane is referred to as **Northern transfer**.

Identification methods

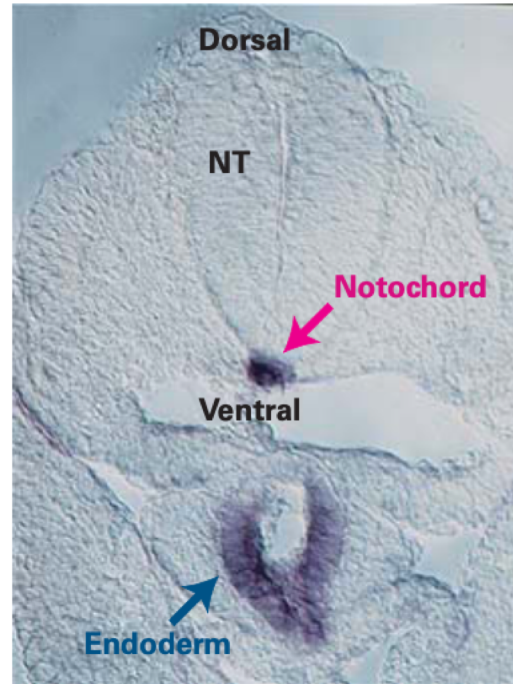
- Hybridization probing.
detects cloned DNA with probes



in-situ hybridization



A whole mouse embryo at about 10 days of development probed for *Sonic hedgehog* mRNA. The stain marks the notochord (red arrow), a rod of mesoderm running along the future spinal cord.



A cross section of a mouse embryo.



A whole *Drosophila* embryo probed for an mRNA produced during trachea development. The repeating pattern of body segments is visible. Anterior (head) is up; ventral is to the left.

Detecting proteins inside a gel electrophoresis

- Electrophoresis is used to separate and analyze proteins based on their size and charge.

SDS PAGE

SDS; DTT or β -ME

native PAGE

native protein