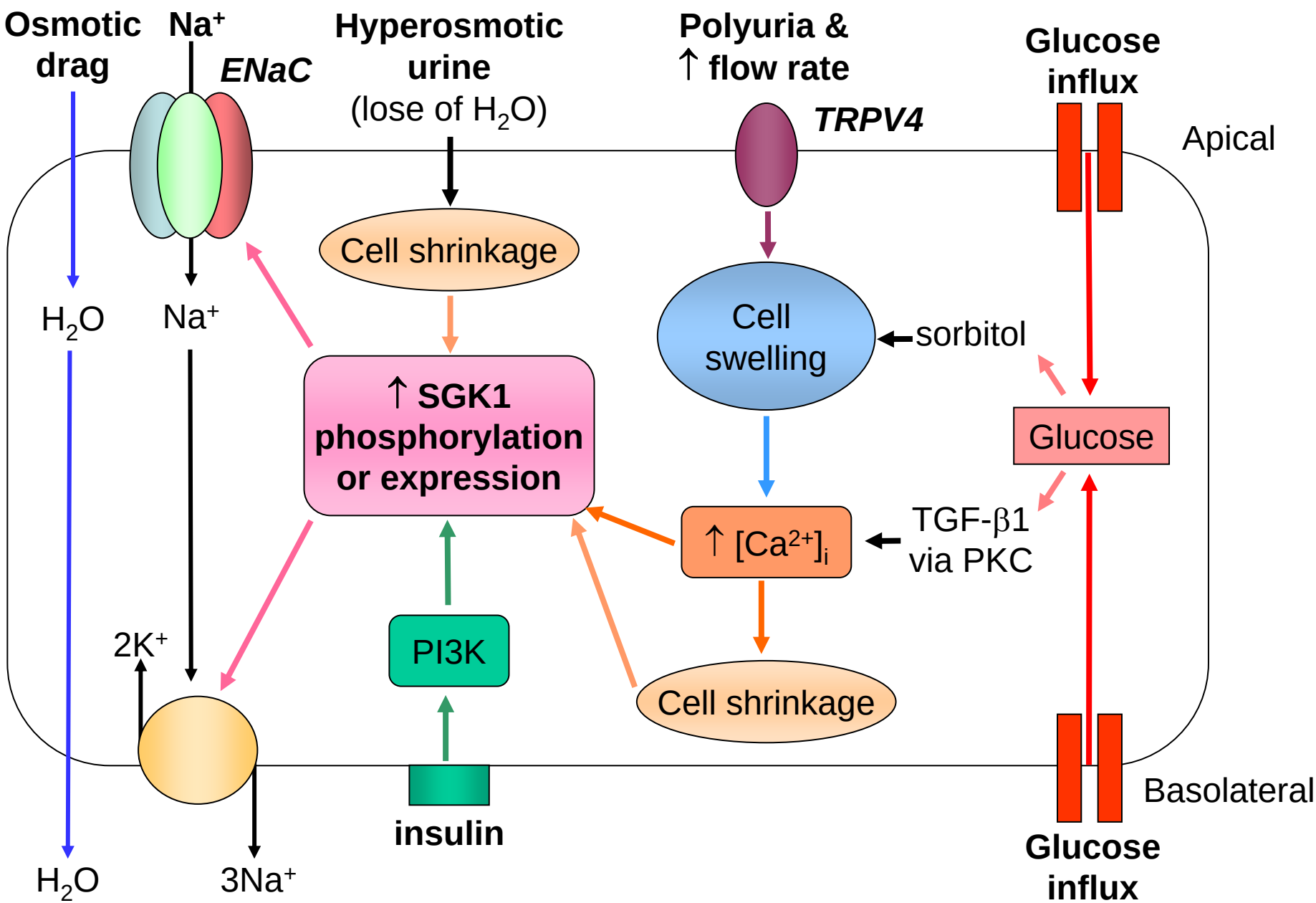
Osmotic drag
Na+
ENaC
Hyperosmotic urine
(lose of H2O)
Polyuria &
↑ flow rate
TRPV4
Glucose influx
Apical
Cell shrinkage
H2O
Na+
Cell swelling
sorbitol
↑ SGK1 phosphorylation or expression
Glucose
↑ [Ca2+]i
TGF-β1 via PKC
2K+
PI3K
Cell shrinkage
Basolateral
insulin
H2O
3Na+
Glucose influx