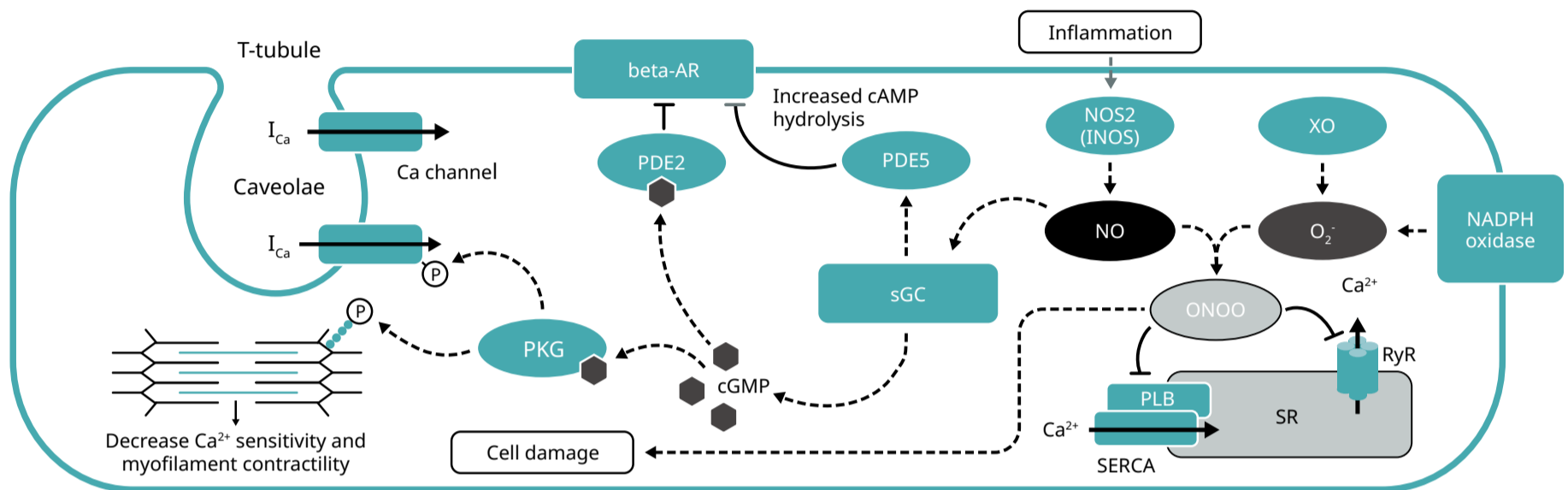


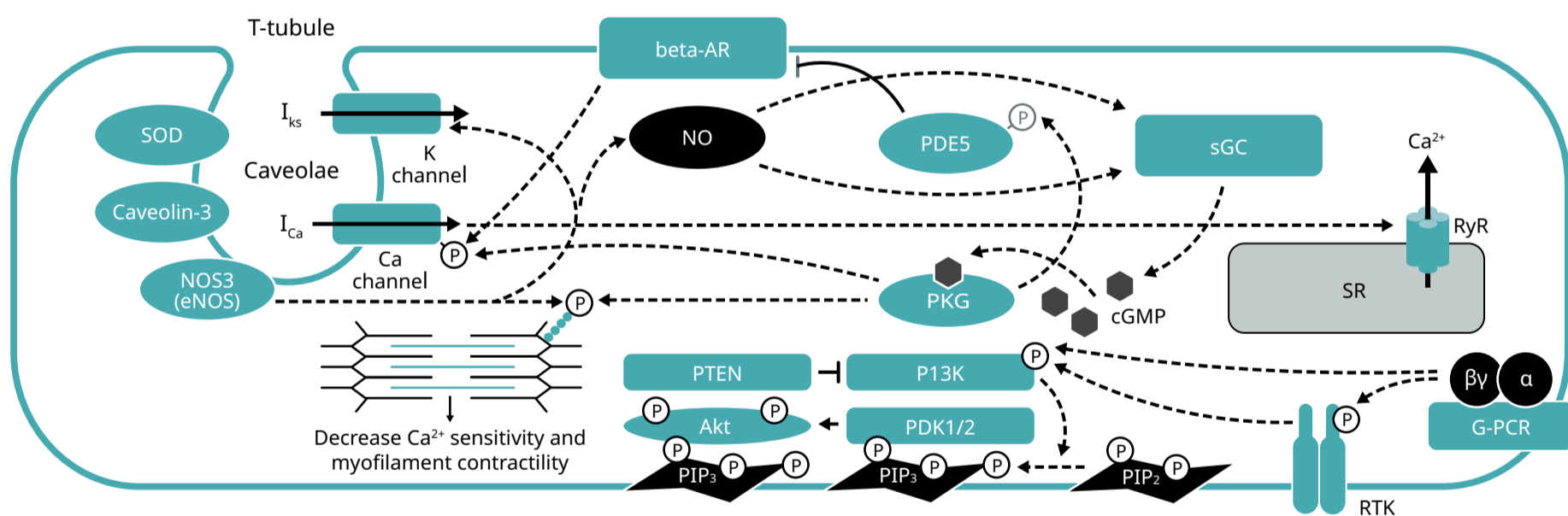
Nitric oxide (NOS) signaling

- Nitric oxide (NO) is synthesized by nitric oxide synthase (NOS), which oxidizes a guanidine nitrogen of L-arginine releasing NO in the form of a free radical and citrulline.
- Three isoforms of NOS have been identified: endothelial (eNOS or NOS3), neuronal (nNOS or NOS1), and inducible (iNOS or NOS2), each with separate functions.
- NO acts as a messenger in diverse functions including vasodilation, neurotransmission, anti-tumor and anti-pathogenic activities, but sustained levels of NO production result in direct tissue toxicity, septic shock, carcinomas and inflammatory conditions.

Inducible NOS (iNOS, NOS2) signaling



Endothelial NOS (eNOS, NOS3) signaling



Neuronal NOS (nNOS, NOS1) signaling

