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 NOS-3), neuronal (nNOS or NOS-1), and inducible (iNOS or NOS-2), 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

Find out more at www.abcam.com/NOS