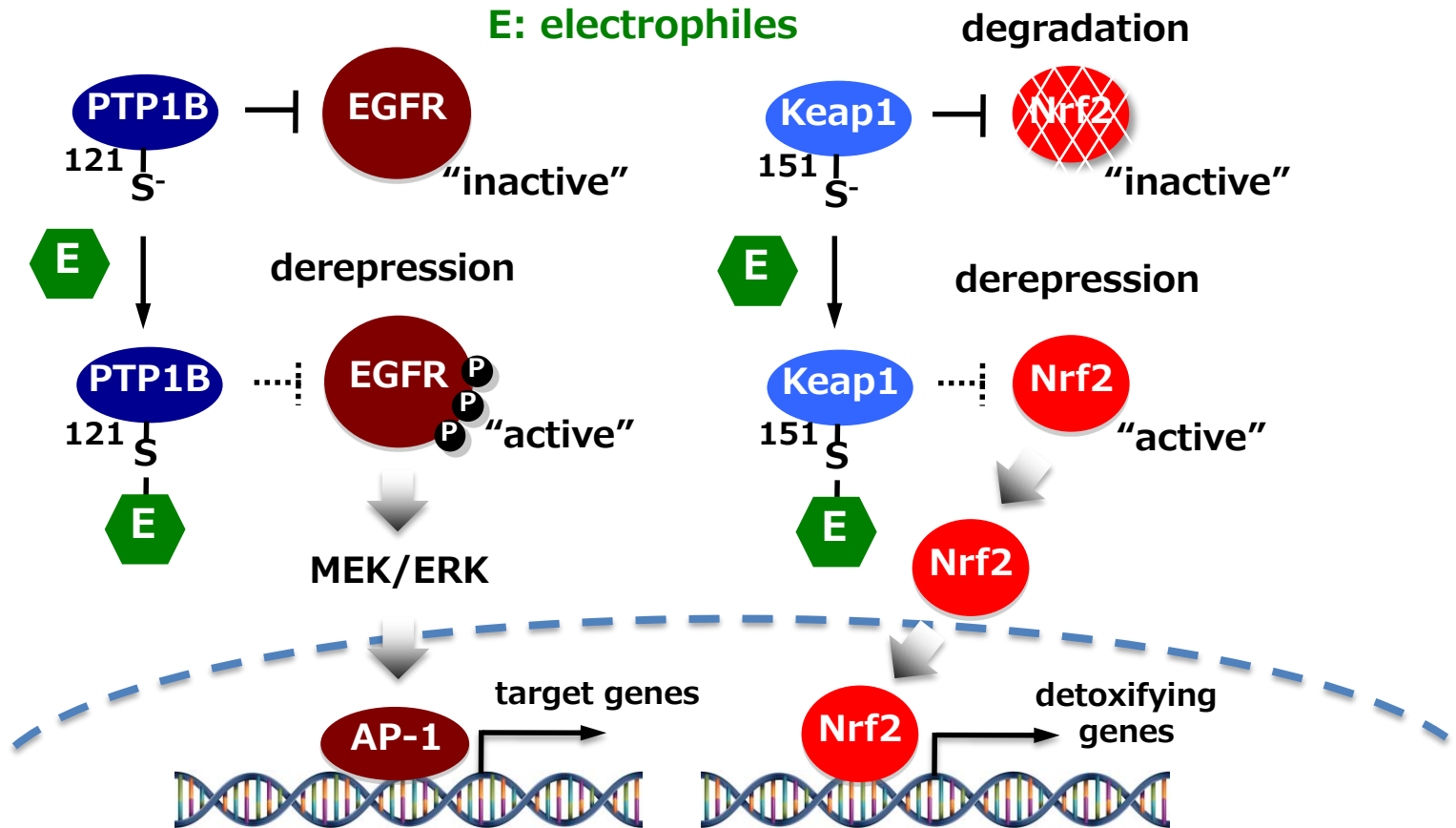


Electrophiles activate electrophilic signal transduction pathways such as PTP1B/EGFR pathway and Keap1/Nrf2 pathway



This laboratory has reported that environmental electrophiles (e.g., 1,2-naphthoquinone, methylmercury) activate electrophilic signal transduction pathways via covalent modification of reactive thiols in sensor proteins.

References: J Biol Chem 2007; 282: 33396-33404.

Annu Rev Pharmacol Toxicol 2012; 52: 221-47.