



Figure 1. Histone demethylation mediated by (A) an LSD family demethylase through an FAD-dependent amine oxidase reaction, and (B) a JmjC domain family demethylase through a 2OG-Fe(II)-dependent dioxygenase reaction. LSD demethylases can demethylate the mono- and dimethylated states of histone lysine residues. The JmjC domain family demethylases can demethylate mono-, di-, and trimethylated histone lysine residues. For simplicity, only monomethyl-lysine is illustrated.