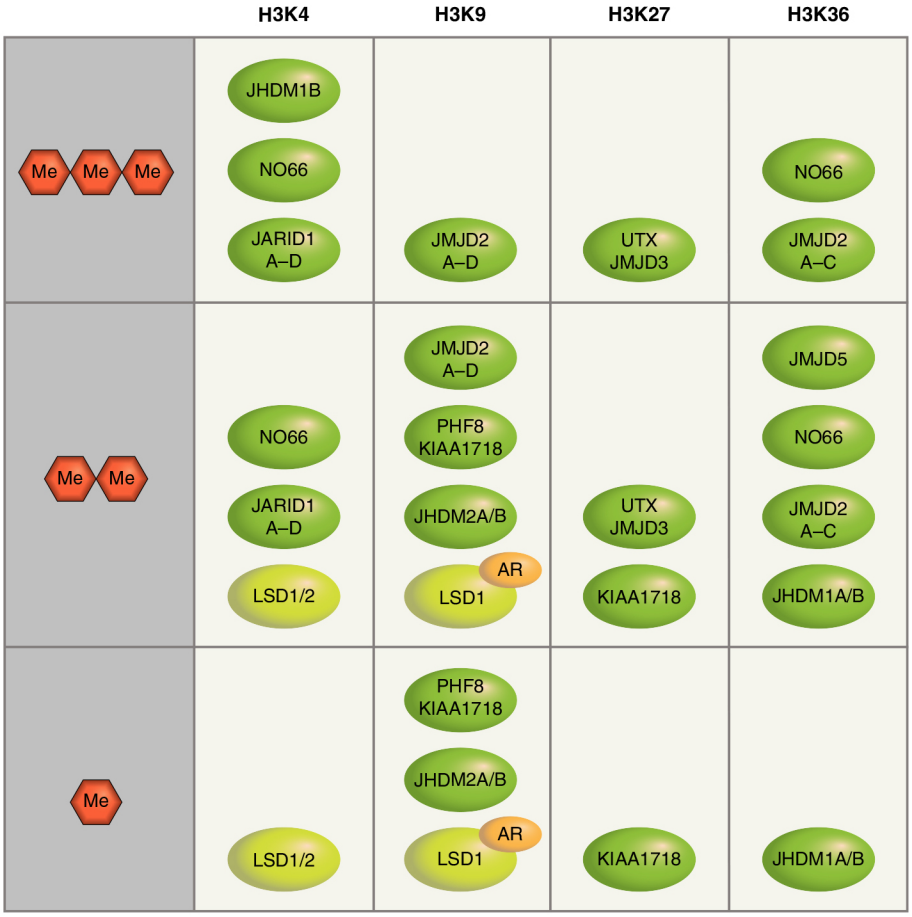

Figure 8. Histone lysine demethylases (KDMs). Histone lysine methylation can be removed by two distinct enzyme classes: amine oxidases (yellow) and hydroxylases (green). Because of their distinct catalytical mechanism, amine oxidases work only on mono- and dimethylation, whereas hydroxylases also convert trimethylation. The specificity of a subset of KDMs is shown for four prominent lysine positions within histone H3. Please note that the historical nomenclature for KDMs is used in the figure. A comprehensive listing and comparison between classical and new nomenclature for KDMs can be found in Black et al. (2012). AR, androgen receptor. (Data from Højfeldt et al. 2013.)