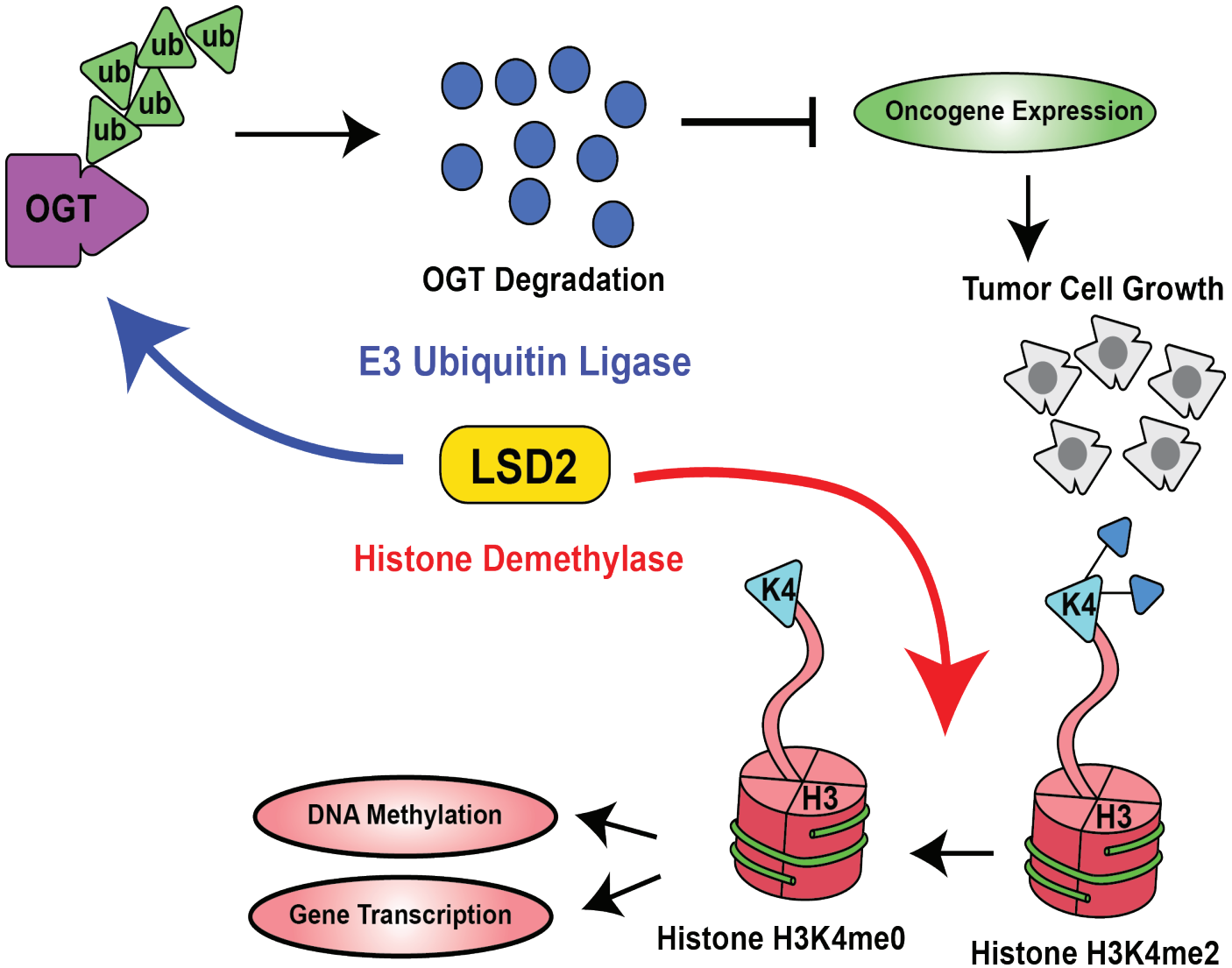
Histone Demethylase Inhibitors



Histones constitute the basic scaffold proteins around which DNA is wound to form nucleosomes which are packed into higher order structures to form chromatin. Methylated lysine and arginine residues on histone tails are believed to be regulatory hallmarks for discriminating transcriptionally active and inactive chromatin. Histone demethylases (HDMs) are particularly responsible for removal of methyl groups predominantly from Arginine and Lysine residues in Histone proteins. There are two main types of HDMs based on their functional mechanism: a flavin adenine dinucleotide (FAD)-dependent amine oxidase, and a Fe (II) and α-ketoglutarate-dependent dioxygenase. HDMs have critical roles in creating suitable methylation patterns for tumor cells to gain metastatic potential. Thus the tremendous therapeutic potential of modulating genetically aberrant or overexpressed HDMs across a wide range of human diseases is increasingly becoming evident. In fact, robust high-throughput screening and hit-finding approaches have enabled the development of highly specific and potent inhibitors. BioVision offers several HDM inhibitors as part of its catalog. These encompass all areas of biological and oncological research.

Please see the products listed in the table below.

GENTAUR

GENTAUR