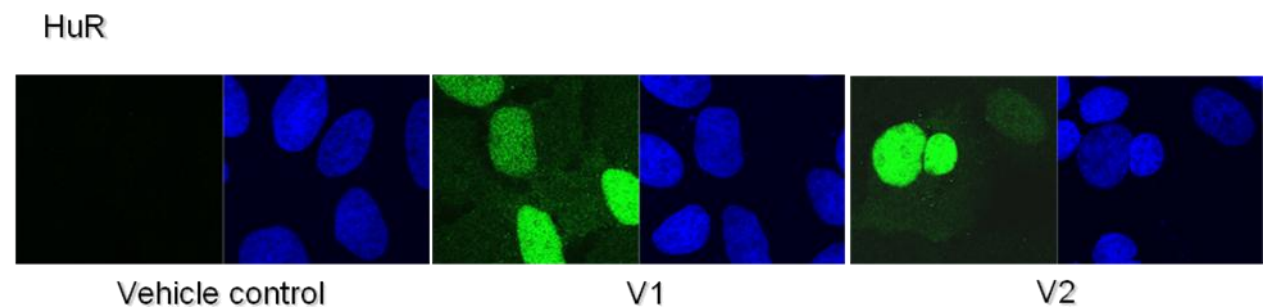


## Novel Function and Intracellular Localization of Methionine Adenosyltransferase 2 $\beta$ Splicing Variants

Human methionine adenosyltransferase 2B (*MAT2B*) gene encodes two major splicing variants, V1 and V2, which are differentially expressed in normal tissues. Both variants are induced in human liver cancer and regulate growth. Researchers from the Division of Gastroenterology and Liver Diseases, University of Southern California (USC) and from CIC bioGUNE have shown, using proteomics analysis, that HuR interacts with *MAT2B* variants and its cytoplasmic content is increased when either *MAT2B* variant is overexpressed. This leads to increased expression of cyclin D1 and cyclin A, known targets of HuR. Conversely, knockdown of endogenously expressed V1 or V2 *MAT2B* isoforms reduces cytoplasmic HuR level and the expression of its targets. Those results support the conclusion that the ability of V1 and V2 to interact and modulate HuR subcellular content is a key mechanism for the effect these *MAT2B* variants have on growth. Whether *MAT2B* regulates HuR subcellular levels in other cancers has not been examined and is worthy of investigation, to see if this is a general mechanism enhancing cancer growth.



<http://www.jbc.org/content/285/26/20015.abstract>