

**P001** Control of MYEOV protein synthesis by upstream open reading frames  
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The *myeov* gene was identified using the tumorigenicity assay with DNA from a patient suffering a gastric carcinoma. *Myeov* DNA amplification and overexpression was detected in several carcinoma cell lines, however, hardly any MYEOV protein could be detected. The *myeov* gene 5' untranslated region (5'UTR) encompasses four upstream AUG codons (uAUGs) and is predicted to fold in a strong secondary structure. These features prompted us to investigate the possible role of the *myeov* 5'UTR in controlling its protein level, and the possibility that MYEOV protein synthesis is mediated by an internal ribosome entry site. Initial experiments using mono- and bicistronic reporter constructs supported this view. However, further examination by *in vitro* transcription/translation assays, Northern blot analysis and the application of promoterless constructs revealed promoter activity in the *myeov* 5'UTR. Despite this strong promoter activity, we did not find any translation products. Our experiments showed that this was due to the presence of uAUGs codons present in the *myeov* 5'UTR. DNA and RNA transfection of the wild type and AUG-mutated 5'UTR, confirmed that these uAUGs abrogate translation of the reporter gene as well as the *myeov* gene.