

**P008** Exploring expression of mammalian poly(A)-binding proteins

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Poly(A)-binding proteins (PABPs) are key regulators of mRNA translation and stability. In mice and humans six cytoplasmic PABPs have been described (PABP1, tPABP, PABP4, PABP5, ePABP, ePABP2) though information on their expression is far from complete. PABP1 protein is generally thought to be ubiquitously expressed and no data is published on endogenous protein expression of the remaining mammalian PABPs.

We have investigated the expression of the PABP family to gain a better understanding of how they might function together. Western blotting of a wide panel of mouse tissues has identified tissue specific differences in expression between PABP1 and PABP4. RT-PCR was also used to compare these results with expression of tPABP and ePABP. We have used Immunohistochemistry in several tissues to further examine whether PABP1 and PABP4 protein expression is cell-type restricted. Immunofluorescence has also been used to compare their subcellular distributions under stress and during the cell cycle.