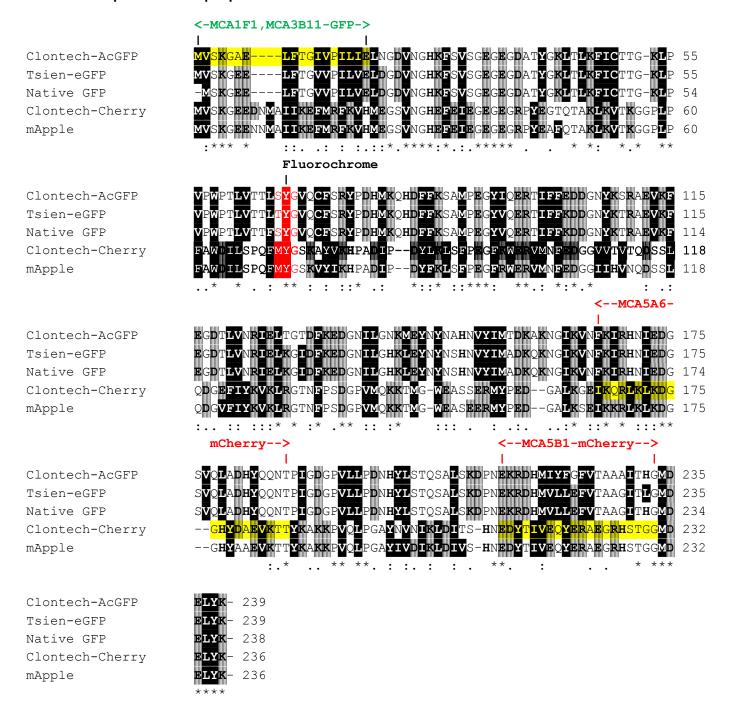
Fluorescent proteins and epitopes for EnCor antibodies



Sequence alignment of native GFP, Clontech/Takara AcGFP, Tsien lab eGFP, mCherry and mApple sequences and epitopes of certain EnCor antibodies. The mouse monoclonal antibodies MCA-1F1 and MCA-3B11 were raised against recombinant AcGFP and we discovered bind to the N-terminal peptide of this molecule. The AcGFP protein is widely used in expression vectors such as those originating in Clontech, now marketed by Takara, and is 94% identical in amino acid sequence to eGFP, a widely used engineered version of native GFP developed in the Tsien lab. We have shown that both MCA-1F1 and MCA-3B11 also bind to the N-terminus of eGFP. They do not recognize mCherry as expected from the above sequence data. The two antibodies are of different isotypes which may be useful for some applications. The MCA-5A6 and MCA-5B1 antibodies were raised against recombinant mCherry and have distinct epitopes as shown. They are both specific for mCherry, showing no cross-reactivity with GFP, though we can predict that they will recognize the mCherry derivative mApple. EnCor currently markets another mouse monoclonal to mCherry, MCA-1C51, the epitope for which is at present unknown.