



HAT^r colonies will not be viable due to lack of functional BRCA2

Figure 1. Generation of ES cells with a conditional allele of *Brca2*. To generate a conditional allele of *Brca2* and to select the recombinants, two *loxP* sites were targeted to the 5' and 3' ends of the gene along with 3' or 5' *HPRT* minigenes. The *Puro* gene was used for positive selection of targeted clones (D). Targeting a Blastidicin resistance gene to replace a portion of exon 11 disrupted the other allele of *Brca2*. The conditional allele of *Brca2* can be deleted by transiently expressing *CRE*. Recombinants are *HAT^r* and *Puro^s*. However, such cells do not survive because of loss of functional BRCA2.