

## ABSTRACT

The expression of BRCA1 and BRCA2 genes, which encode breast cancer susceptibility genes in humans, is accompanied by multiple complex cellular functions. However, there is significant evidence linking these genes to homologous recombination, transcriptional control, tissue proliferation, and the localization of their proteins to nucleus or cytoplasm. Nevertheless, it is uncertain whether these 2 genes are expressed in premeiotic germ cells or can still be expressed independently in mitotic spermatogonia. We present an immunohistochemical study of this gene expression pattern that leads patients.

## INTRODUCTION

**Introduction** The BRCA1 and BRCA2 genes are expressed in the ovaries. The BRCA1 and BRCA2 genes are found in both ovaries and uterus. The BRCA1 and BRCA2 genes are located on chromosome 15q35–q35. A mutation in BRCA1 or BRCA2 leads to the severe defects of ovarian cancer. The BRCA1 and BRCA2 genes are common mutations in women with a BRCA1 mutation. The BRCA1 and BRCA2 genes are highly expressed in both ovaries and uterus. The BRCA1 and BRCA2 genes are most frequently mutated in women. In adult mouse tissues, Zabludoff et al conducted a study on the distribution of Brca1 mRNA in different tissues and discovered that Brca1 was most frequently present in the testis and ovary, while high level Brca1 expression was found in meiotic cells and postmeiotic spermatites, and at varying levels in Sertoli and interstitial cells. Given these results, we immunochemically examined the presence of human BRCA1 and BRCA2 proteins in an ovotestis using a different panel of antibodies against BRCA1 (Becky-5-K) and Bacillan's companion antibody BLR2.

## CONCLUSION

Lastly, we demonstrate with various antibodies that both broad-spectrum BRCA1 and BRCA2 proteins are widely expressed in two types of non-embryogenic human tissues associated with the cell cycle: Brca1, Brca1 (Brca1) and Brca2. Brca1 is expressed during growth and differentiation in the ovary, while Brca2 is present outside the site of spermatogenesis.