

**Abstract:**

ABCG2 (ABCP/MXR/BCRP) transporters create homodimers through the plasma membrane. They play an important role in transmembrane transport of a wide spectrum of biological substrates. They are essential for renal, intestinal, placental and haematoencephalic barrier function. In particular they perform an excretory function, protect cells against toxic compounds and xenobiotic cumulation. They are also involved in metabolic regulation of stem cells. This bachelor thesis summarizes information about ABCG2 protein function, their physiological role in humans and other mammals.

**Keywords:** ABCG2, BCRP, membrane transporters, multidrug resistention (MDR), ATP binding cassette family (ABC)