Suppose a woman has a mosaic pattern of skin, with some patches lacking sweat glands. She inherited a functional allele for sweat glands from one parent and a nonfunctional one from the other parent. On what chromosome are these alleles located?

A  X chromosome  
B  Y chromosome  
C  chromosome 13  
D  chromosome 21  

This mosaic pattern occurs as a result of random inactivation of a female’s X chromosome.  
Answer A.