

What is the purpose of the X chromosome inactivation? In which sex does it occur?

The X chromosome is inactivated in females because, at first, they have two active X chromosomes, and this can lead to genetic abnormalities. It is deactivated to prevent this.

A father has PKU and the mother does not. Together, they have a child who also has PKU. What is the father's genotype?

The father must have a dominant genotype for this to occur.