

The human chromosomes and chromosomal locations (CODIS sites) at which the FBI looks for repeating DNA sequences. For the class activity, note the TPOX region on chromosome 2.

(X and Y count as one chromosome pair. The AMELs are not CODIS sites.)

Source: Biochemical Science Division, Chemical Science & Technology Laboratory, National Institute of Standards and Technology, http://www.cstl.nist.gov/div831/strbase/images/codis.jpg and http://www.cstl.nist.gov/div831/strbase/fbicore.htm

Base Pair Sequences							
Chromosome from father		Chromosome from mother					
G	С	G	С				
Α	Т	Α	Т				
Α	Т	Α	Т				
Т	Α	Т	Α				
G	С	G	С				
Α	Т	Α	Т				
Α	Т	Α	Т				
Т	Α	Т	Α				
		G	С				
		Α	Т				
		Α	Т				
		T	Α				

TPOX region of chromosome 2 of hair found in bank robber's glove.

TPOX,		TP	TPOX,		TPOX,	
hair in		Sus	pect	Sus	Suspect	
glo	ove		1		2	
G	G	Α	G	Т	G	
Α	Α	С	С	С	G	
Α	Α	Α	G	Α	G	
T	T	G	G	G	G	
G	G	A	Α	Α	A	
Α	Α	A	Т	A	A	
Α	Α	T	Α	Т	T	
T	T	G	G	G	G	
	G	A	Α	Α	A	
	Α	A	Α	Α	A	
	Α	Т	Т	Т	T	
	T	G	G	G	С	
		Α	Α	Α	T	
		Α	С	A	G	
		G	G	Т	Α	
		G	G	G	С	
		Α	Α	Α	T	
		Α	Α	Α	G	
		Т	Т	Т	Α	

Comparison of the TPOX region of chromosome 2 of the unknown bank robber and two suspects.