



## Identify the most relevant *CFTR* mutations and variants for newborn screening and confirmatory genotyping

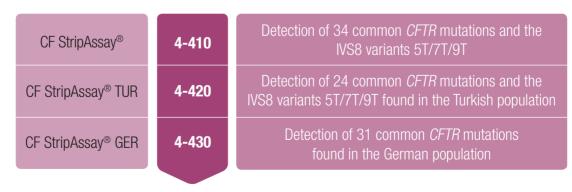
Cystic Fibrosis (CF) is the most common lifelimiting autosomal recessive disorder in the Caucasian population. The disease incidence is estimated to be 1 in 2,500 to 4,000 live births.

Cystic Fibrosis Transmembrane Conductance Regulator (CFTR) represents an anion channel which is responsible for the salt-, fluid- and pH-balance in secretory and absorptive epithelial tissues. Mutations in the *CFTR* gene lead to dysfunction of chloride transport across cell membranes.

Affected children commonly experience decreased pulmonary function along with persistent respiratory infections, pancreatic insufficiency and malnutrition.

*CFTR* genotyping enables early diagnosis in newborn screening and minimizes emotional stress for parents.

ViennaLab offers reliable and convenient reverse-hybridization assays tailored to population-specific mutations in different regions.



The Assay



## ViennaLab CF StripAssays®

- Simple protocol for complex diagnostic questions
- Manual or automated processing
- No expensive lab equipment
- Ready-to-use reagents
- CE/IVD-labeled kits including DNA extraction

StripAssays®				
Mutations	CF	CF TUR	CF GER	
CFTRdel2,3 (21kb)	Х		Х	
E60X			Х	
G85E	Х	Х	Х	
E92X		Х	Х	
E92K		х		
394delTT	Х			
R117H	х			
Y122X	Х			
M152V		Х		
621+1G>T	Х	Х	Х	
711+1G>T	Х			
1078delT	х		Х	
R334W	х	х	Х	
1336K			Х	
R347H	Х	Х		
R347P	Х	Х	Х	
IVS8 T5/T7/T9	Х	Х		
A455E	Х		Х	
I507del (-ATC)	Х		Х	
F508del (-CTT)	Х	Х	Х	
1677delTA		Х	Х	
1717-1G>A	Х	Х	Х	
G542X	Х	Х	х	

StripAssays®				
Mutations	CF	CF TUR	CF GER	
G551D	Х	01 1011	X	
R553X	X		X	
R560T	X		^	
1898+1G>A	X			
2043delG	^	X		
2143delT	X	^	X	
		v		
2183AA>G	Х	Х	Х	
2184insA	Х	Х	Х	
2184delA	Х	Х	Х	
E831X		Х		
2789+5G>A	Х	Х	Х	
3120+1G>A	х			
3272-26A>G	х		х	
Y1092X (C>A)	х		х	
W1098X (TGA)		х		
M1101K			х	
D1152H		Х		
R1158X		Х		
R1162X	х	Х	Х	
3659delC	Х		Х	
3849+10kbC>T	Х		Х	
3905insT	Х		Х	
W1282X	Х	Х	Х	
N1303K	Х	Х	х	

## The three steps of the StripAssays®

Step	Requirement
1. Amplification: Multiplex PCR. Simultaneous biotin-labeling	Thermocycler
2. Hybridization: Directly on the StripAssay® teststrips	Incubator
3. Identification: Labeled products detected by streptavidin-alkaline phosphatase	Naked eye or scanner & software

## **Order Information:**

CF StripAssay® 4-410 (10 tests/kit) • CF StripAssay® TUR 4-420 (10 tests/kit) • CF StripAssay® GER 4-430 (10 tests/kit)

ViennaLab offers StripAssays® for a wide range of diagnostic applications. Visit www.viennalab.com



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