



## PGX-CYP2D6 StripAssay®

**Identifies individuals with poor metabolizer phenotype of CYP2D6**

- The liver enzyme CYP2D6 is responsible for the metabolism of about 25% of all currently prescribed drugs
- Differences in enzymatic activity due to polymorphisms in the CYP2D6 gene contribute to the inter-individual variability in drug response
- Around 7% of Caucasians carry defective alleles that result in partially or completely inactive enzymes
- Knowing the metabolizer status of a patient allows a better prediction of adverse side effects and suboptimal treatment efficacy
- CYP2D6 genotyping helps to determine the optimum type and dosage of drugs for specific disorders



**Individualize drug therapy according to CYP2D6 genotypes**

**ViennaLab PGX-CYP2D6 StripAssay® detects the most common variants with impaired enzyme activity**

- **Simple protocol for complex diagnostic questions**
- **Manual or automated**
- **No expensive lab equipment required**
- **Ready-to-use reagents**
- **Complete CE-certified kit – includes DNA extraction**



## Cytochrome P450 2D6

CYP2D6, a member of the cytochrome P450 superfamily, is one of the most important liver enzymes involved in the metabolism of xenobiotics in the body. Numerous drugs prescribed for the treatment of breast cancer (tamoxifen), cardiac diseases (antiarrhythmics, beta-receptor blockers), psychiatric disorders (antipsychotics, antidepressants) or pain

(opiates) are substrates for CYP2D6. Patients with defective enzyme variants are at risk of developing severe adverse reactions due to drug accumulation and toxicity. Conversely, when formation of an active metabolite is essential for the action of a drug, these patients can exhibit diminished response to therapy compared to extensive metabolizers.

**The PGX-CYP2D6 StripAssay® detects the allelic variants CYP2D6\*3 (2637delA), CYP2D6\*4 (1934G>A) and CYP2D6\*6 (1795delT)**

Gene	Cellular function	*3, *4 or *6 allele	Phenotype
CYP2D6	Phase I drug metabolizing enzyme	Absent	Extensive metabolizer
		One allele present	Intermediate metabolizer
		Two alleles present	Poor metabolizer

### The three steps of the ViennaLab PGX-CYP2D6 StripAssay®

Step	Requirement
1. Amplification: Multiplex PCR-amplification. 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

Cat.no.: PGX-CYP2D6 StripAssay® 4-760 (20 tests/kit)

**ViennaLab offers StripAssays® for a wide range of diagnostic applications. Visit [www.viennalab.com](http://www.viennalab.com)**

Manufacturer:  
ViennaLab Diagnostics GmbH  
Gaudenzdorfer Gürtel 43–45  
A-1120 Vienna, Austria  
Phone (+43-1) 8120156-0  
Fax (+43-1) 8120156-19  
[info@viennalab.com](mailto:info@viennalab.com)



**Oasis**  
DIAGNOSTICS

15720 NE 31st Ave, Vancouver WA, 98686  
Tel: 360-546-1563 Email: [info@4saliva.com](mailto:info@4saliva.com)  
[www.4saliva.com](http://www.4saliva.com)