

# Courtagen's devSEEK™



## SNP Analysis for devSEEK® Triome, devSEEK® & devACT® Panels

### Examine key metabolic pathways

The methylation cycle plays an important role in the body's synthesis of DNA and production of the amino acid homocysteine. Variants in a number of genes involved in the methylation cycle have been associated (primarily as a risk factor) with a range of conditions, including neural tube defects (PMID:10323741), depression (PMID:12796225), schizophrenia (PMID:16172608), cardiovascular disease (PMID:8554066), stroke (PMID:15534175), hypertension (PMID:17726486), cancer (PMID:17350979), and others. In addition, a number of B vitamins, including pyridoxine (B6), folate/folic acid (B9), and cobalamin (B12) have roles in the methylation cycle.

The SNP Analysis provides supplementary data for physicians regarding important metabolic pathways. The analysis is available as an additional report when ordered along with the devSEEK Triome, Combined Neurodevelopmental Analysis (devACT and devSEEK), or individual devSEEK Neurodevelopmental Disorder panel and devACT Clinical Management panel. The analysis report contains easy-to-read, color-coded information describing the gene, variant rsID, reference base, variant base, and results for 60 SNPs. Quickly identify whether the patient has zero, one, or two copies of the SNP variant. In addition, a data file containing over 1,100 SNPs will be delivered to the physician's portal, which can be used with an online SNP analysis service in the event that additional information is desired.

Now the complete picture is available to physicians with one test order — obtain diagnostic sequencing results to understand the underlying genetic etiology of multi-system disorders, with the added benefit of SNP analysis for known pathway variants.

### Genes and SNP Variants

ACAT1 (1)	ENPP1 (1)	MTHFR (3)	TGFB1 (3)
ACE (1)	GSTM1 (1)	MTR (1)	TNF- $\alpha$ (2)
ADM (1)	GSTP (2)	MTRR (7)	TRAF1 (1)
AHCY (3)	IL10 (1)	NLRP6 (1)	TRAP1 (1)
BDNF (1)	IL23R (1)	NOS3 (1)	USF1 (1)
BHMT (4)	IL6 (1)	PTPN22 (1)	VDR (3)
C5 (1)	IL6R (1)	PTS (1)	
CBS (3)	KCNJ11 (1)	SHMT1 (1)	
COMT (3)	MAOA (1)	SOD2 (1)	
DHFR (1)	MAOB (1)	SUOX (2)	

Courtagen provides saliva DNA specimen collection kits at no charge. Questions? Contact our Patient Advocates.

P 877.395.7608 | F 617.892.7192 | email: [genomics@courtagen.com](mailto:genomics@courtagen.com) | [www.courtagen.com](http://www.courtagen.com)

## Courtagen's Unmatched Customer Support

**Turn Around Time:** 4-6 weeks. Results are delivered in weeks, not months.

**Saliva Sample:** DNA for sequencing is reliably extracted from a single saliva sample. No blood draw or muscle biopsy required; however, blood and muscle tissue are accepted. No charge saliva kits are provided, and no charge phlebotomy services are available.

**Insurance Assistance:** Courtagen works with patients, physicians, and insurance carriers to pre-approve each test. Courtagen will bill the insurance company and is willing to handle an appeal process as needed.

**Courtagen Care Financial Assistance Program:** Provides financial assistance to patients based on demonstrated financial need. A qualified applicant may be asked to contribute between \$0 and a maximum cost sharing of \$200 depending on determination of financial need.

**Online Portal:** A secure physician online portal is available for ordering genetic tests and accessing patient reports when completed.

**Clinical Experience:** Courtagen's Medical Director, Laboratory Director, and variant science team have over 25 years of experience in the treatment and genetic interpretation of neurological and metabolic disorders.

**Data and DNA Security:** Advanced IT solutions safeguard patient records and financial information. In the laboratory, Courtagen de-identifies patient and test records and uses the proprietary method of DREAM PCR to provide exceptional lab decontamination.

## Required forms

**Courtagen Test Requisition** (completed and signed by ordering clinician)

**Signed Patient Consent** (on the Courtagen Test Requisition or Consent Form provided in the saliva kit)

**Photocopy front & back of all insurance cards** (including subscriber date of birth)