



VMA, HVA, 5-HIAA

NEUROTRANSMITTERS TEST

Quantitative analysis of neurotransmitter metabolites in identifying metabolism-related disorders and management of mental health disorders. Testing for:

- ✓ Vanillylmandelic Acid
- ✓ Homovanillic Acid
- ✓ 5-Hydroxyindoleacetic Acid



VANILLYLMANDELLIC ACID (VMA)

- Low levels of this is linked to dopamine deficiency is associated with CNS Disorders (Depression, Anxiety, Schizophrenia, and Insomnia)
- Elevated levels of epinephrine are linked into hypertension, panic attacks, and hyperactivity disorders
- For screening and monitoring of neuroblastoma and other neural crest tumors

HOMOVANILLIC ACID (HVA)

- Diagnosis of Autism Spectrum Disorders and inborn errors of metabolism
- Used to test the metabolite breakdown of dopamine, low levels of HVA is linked into depression and other mood disorders
- Management of patients with relapsing-remitting multiple sclerosis
- Diagnosis and monitoring of treatment for catecholamine secreting carcinoid tumors

5-HYDROXYINDOLEACETIC ACID (5-HIAA)

- Metabolite marker to determine serotonin levels. Lower levels of 5-HIAA are linked with aggressive or violent behavior, depression, obsessive compulsive disorder, fatigue, insomnia, and attention deficit hyperactivity disorder (ADHD).
- Screening of patients with possible inborn error of catecholamine metabolism
- Diagnosis and monitoring for treatment of neuroblastoma

Patient Preparation

Limit water intake into 2L before the day of the collection. No supplementation for 3 days and no intake of any acidic fruits 2 days prior the test.

Collection Guideline

Collect at least 20mL of first morning mid stream urine, Seal the container with parafilm and put into zip lock. Freeze / Store into -20C