

M2 PYRUVATE KINASE

M2 Pyruvate Kinase (M2-PK), as measured in faeces, is a tumour marker for colorectal cancer. Though M2-PK can be elevated in many tumour types, rather than being an organ-specific tumour marker, increased stool (faecal) levels can be used as an early detection of colorectal carcinomas.

M2-PK is a sensitive, stable marker that is unaffected by medications, dietary supplements, or enzymatic degradation. M2-PK forms part of CDSA testing, an advanced non-invasive diagnostic tool for assessing gastrointestinal function.

Risk factors associated with increased incidence of colorectal cancers:

- Smoking
- High alcohol consumption
- Physical inactivity
- Obesity
- Type 2 diabetes

Bowel cancer, also known as colorectal cancer is a common cancer in western societies. The tumour marker M2 Pyruvate Kinase is a form of the enzyme pyruvate kinase, the key enzyme in the cancer cells metabolism used to identify colorectal cancer, other malignancies and autoimmune gut-associated diseases. Some non-cancerous diseases may present with an increased level of M2-PK, such as inflammatory intestinal diseases like ulcerative colitis and Crohn's disease.

M2-PK is a fast non-invasive stool test used for initial screening of bowel cancer. This stool test can detect bleeding and non-bleeding bowel polyps and tumours. It has been shown to detect 85% of colon cancer and 56% of rectal cancer in a study of 917 patients (British Journal of Cancer 2007;96:1329–1334). WHO recommends screening of bowel cancer for anyone over the age of 50.

An elevated M2-PK result forms part of preliminary screening which is recommended to refer for clinical endoscopy or colonoscopy as follow up. M2-PK can be used as an assessment or response tool following treatment.

CONDITIONS ASSOCIATED WITH ELEVATED M2PK

Crohns disease, Ulcerative colitis

Obesity

Polyps

Kidney, lung cancer

Colorectal cancer

Inflammation

M2-PK can assist physicians develop earlier, more effective preventive interventions, improve the timing and precision of treatments, and reduce the risk of clinical relapse in certain groups of patients. It will also allow physicians to better evaluate and document the medical necessity for more invasive procedures, such as colonoscopy or endoscopy. High levels of M2-PK are indicative of significant inflammation in the gastrointestinal tract and colorectal cancer.

M2-PYRUVATE KINASE (faecal) [Test code: 2012]

❖ M2-Pyruvate kinase

Other M2PK tests available

- **CDSA Level 3+ [2006]:** Macroscopic & Microscopic Description; Digestive, Absorption & Metabolic markers; Inflammation markers; Tumour/Ulcer markers; Beneficial & other Bacteria; Yeasts; Parasites (visual detection) & Sensitivities
- **CDSA Level 4+ [2008]:** Macroscopic & Microscopic Description; Digestive, Absorption & Metabolic markers; Inflammation markers; Tumour/Ulcer markers; Beneficial & other Bacteria; Yeasts; Parasites (visual & chemical EIA detection) & Sensitivities

How to order a test kit:

To order a test kit simply request the test name or test code on a NutriPATH request form test code and have the patient phone NutriPATH Customer Service on 1300 688 522.



Phone 1300 688 522 for further details
www.nutripath.com.au