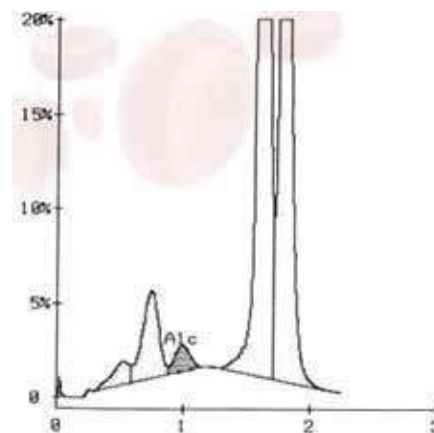




## HbA1c HPLC

ANALYTE ID	%	TIME	AREA
A1b	2.6	0.53	15815
F	8.9	0.75	54766
A1c	2.8	0.99	15681
A0	85.5	1.61	528425
S	0.0	1.78	29881

TOTAL AREA		
A1c	2.8%	0.0%



EPC / PRODUCTS / APPLICATION / SOFTWARE / ACCESSORIES / CONSUMABLES / SERVICES

**Analytical Technologies Limited**

An ISO 9001 Certified Company

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## **BIOLCTM SYSTEMS, REAGENT KITS, CALIBRATOR AND CONTROLS FOR CLINICAL & MEDICAL DIAGNOSTICS**

### **►► DIABETES, HEMOGLOBINS:**

- Hemoglobin Variants / Hemoglobin A1c (HbA1c).
- BThalassemia Screening in Whole Blood.
- For Variant<sup>TM</sup> and BioLC OR hba1HPLC.
- Hemoglobin A1c (HbA1c) in Whole Blood with Diamatt<sup>TM</sup>.

### **►► ALCOHOLISM, DRUG ABUSE :**

- Basic Drugs in Urine - On-Line Analysis.
- Benzodiazepines in Urine - On-line Analysis.
- CDT in Serum.
- Manual sample preparation.
- TOX.I.S.
  - Basic Drugs in Urine - On-Line Analysis.
  - Benzodiazepines in Urine - On-Line Analysis.

### **►► BIOGENIC AMINES :**

- Catecholamines in Urine & Plasma.
- Metanephrines.
- VMA, HVA, 5-HIAA in Urine.
- Serotonin.
  - With manual and automatic sample preparation.

### **►► METABOLIC DISEASES :**

- Porphyrins Differentiated in Urine.
- 5-Aminolevulinic Acid.
- Porphobilinogen in Urine.
- Homocysteine in Plasma.
- Hydroxyproline in Urine.

### ►► **OXIDATIVE STRESS :**

- Coenzyme QiO in Whole Blood / Plasma / Serum.
- Carotene in Plasma/ Serum.
- Glutathione in Whole Blood.
- Malondialdehyde in Plasma Serum.
- Vitamin C in Plasma.

### ►► **THERAPEUTIC DRUG MONITORING :**

- Aminodarone / Desethylamiodarone.
- Benzodiazepines & Tricyclic Antidepressants.
- Antiepileptic drugs (incl. Lamotrigine, Trileptal, Sultiam, Zonisamide).
- Levetiracetam.
- Mycophenolic Acid.
- Olanzapine, Desmethylozanapine.
- Itraconazole, Posaconazole.
- Anti-HIV Drugs.

### ►► **RISK FACTOR FOR ARTERIOSCLEROSIS :**

- Homocysteine

### ►► **ANTIPSYCHOTIC DRUGS :**

- A typical Neuroleptics in Plasma/ Serum -On-Line Analysis

### ►► **PHENYLALANINE (Phe, Tyr, Trp) :**

- in Whole Blood, Plasma / Filterspots
- Porphyrins Differentiated in Urine
- Total Porphyrins in Urine

## ►► VITAMIN STATUS :

- Vitamins A and E in Plasma
- Vitamin Bi in Whole Blood
- Vitamin B2 in Whole Blood
- Vitamin B6 in Plasma / Whole Blood
- Vitamins Bi, B2, B6 (Combikit)
- 25-OH Vitamin D2 / D3 in Plasma / Serum

## ►► METANEPHRINES IN URINE :

- With manual and automatic sample preparation
- Serotonin in Plasma
- Serotonin in Urine

## ►► OCCUPATIONAL MEDICINE :

- Hippurich Acid
- Methyl Hippurich Acid,
- Mendelic Acid
- Phenyl Glyoxylic Acid
- O-Cresol
- P-Cresol & Phenol

## ►► OSTEOPOROSIS DIAGNOSIS :

- Cross links (pyridiloline, Dioxy pyridiloline)
- 25/OH/Vitamin, D3/D2

## PORPHYRIN PROFILING AMINO ACIDS

# HbA1C HPLC

## ►► INTRODUCTION :

Hemoglobin Alc(HbA1C) Hemoglobin venant are very useful tests in monitoring and diagnosis of diabetic, anemia, Sick Cell, Thalassemia patients, HbA1c is Measurement of the Mean Amount of Blood Glucose Present in the patient Over The Previous 3 months and is Therefore useful as monitoring & Diagnostic Tools.

## ►► TECHNOLOGY :

HbA1C 3000 Analyzer Uses the Established International Reference Method of ion Exchange Chromatography with HPLC Principle. It Uses The Micro Column And Reagents to Separate The HbA1C From the Non Glycated Fraction.

HbA1C 3000 Uses Ion Exchange Chromatography In Conjunction with Gradient Elution to Separate Human Hemoglobin Subtypes and Venants from Hemolysed whole Blood, The Separated Hemoglobin Fractions are Monitored by means of Absorption of light And The Chromatogram Obtained is Recorded and Stored By Internal Computer. A software program in instrument performs the analysis of the Chromatogram Generates results.

## ►► PERFORMANCE CHARACTERISTICS :

Method: Ion Exchange Chromatography with HPLC Principal Automatic Sample Entry on Board Capacity of 50 sample or 120 samples sample Cycle:  $\leq 150$ s/TEST Good Precision: CV  $\leq 2\%$

## ►► EXPAND CAPACITY :

- Transmit Data Via RS232
- Print Test Result Automatically
- Password Protected To Prevent Misuse
- Sample Cycle:  $\leq 150$ s/TEST (for HbA1 HPLC)
- Spinning of vacutainer before aspiration to avoid improper sampling
- Built column thermostat for reproducibility of results.

## ►► TESTING :

- Wavelength: 415NM (190- 700 for BioLC)
- Measuring Range (NGSP VALUES): 4%-17 %, R> =0.99
- Precision: CV<=2%
- Automatic Mixing,barcode Reading and reagent Level Alarm
- Power Source: Voltage: 220/240V
- Current Frequency: 50-60Hz
- Power:<= 100VA
- Dimensions: L:W:H = 610MM\*500MM\*410MM
- Net Weight: 28Kg

## ►► OPTIONAL ITEMS :

### Optional Feature For HbA1c HPLC System

- Automatic Mixing
- Barcode Reading
- Data Input: Touch Screen
- Reagent Level Alarm
- Eliminate Unstable RB and Identify Variant RB
- Interface to Laboratory Information Management System (LIMS)
- Automatic Identify The Sample Type: Diluent Mode Or Whole Blood Mode
- Integral Thermal Printer
- Autosampler (120 Samples)/Auto Loader (50 Samples)

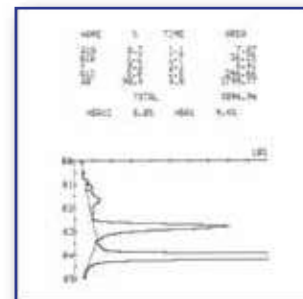
## Testimonials / Chromatograms

**Chromatogram of the HbA1c reference standard (Order no 11011):**

**HbA1c analyzer Diamat, 5-min Program**

**Retention Time:**

HbA1a:	1.01mm
Hba1b:	1.7 min
HbF:	2.1 min
HbA1c:	2.8 min
Hb O:	4.0 min

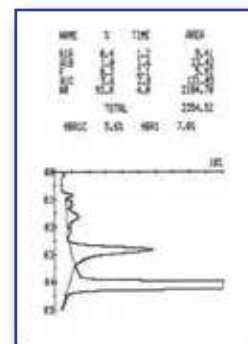


**Chromatogram of a hemolysed nondiabetic whole blood sample**

**HbA1c analyzer Diamat, 5-min Program**

**Retention Time:**

HbA1a	: 1.2mm
Hba1b	: 1.6 min
HbF	: 2.1mm
HbA1c	: 2.8 min
Hb O	: 4.0 min

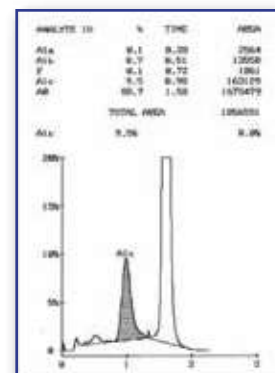


**Chromatogram of a hemolysed diabetic whole blood sample**

**HbA1c analyzer Variant**

**Retention Time:**

HbA1a	: 0.38 min
Hba1b	: 0.51 min
HbF	: 0.72 min
HbA1c	: 0.98 min
Hb O	: 1.58mm

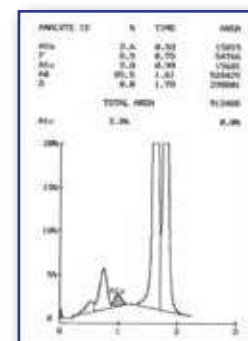


**Chromatogram of a hemolysed whole blood sample with increased Hb F and heterozygote Hb S**

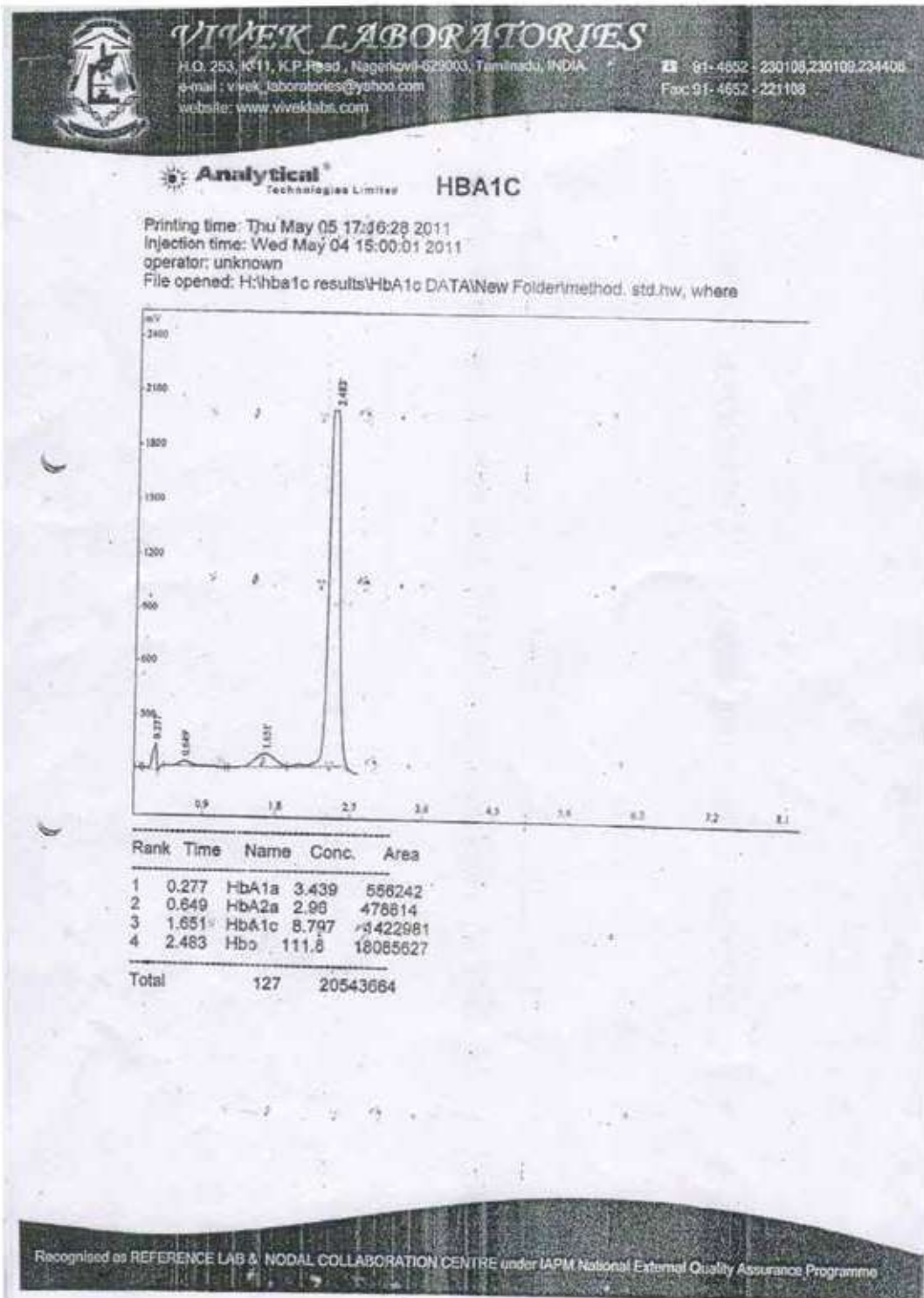
**HbA1c analyzer Variant**

**Retention Time:**

HbA1b	: 0.53 min
HbF	: 0.75 min
HbA1C	: 0.99 min
HbA O	: 1.61 min
HbS	: 1.78 min

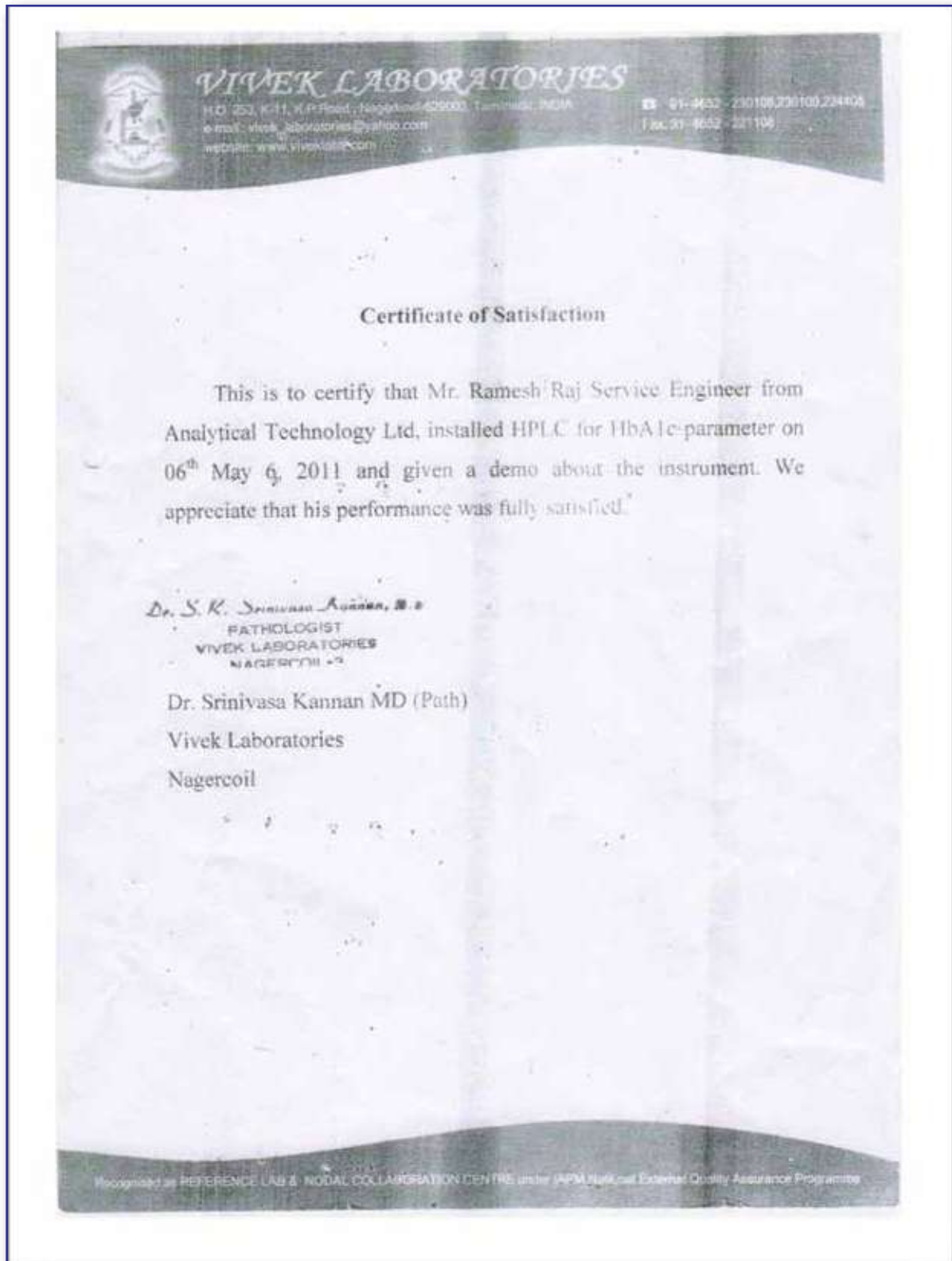


## HbA1c Chromatogram Report





## HbA1c Satisfactory Certificate



## ►► Regulatory compliances



## ►► Corporate Social Responsibility

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1. Research & Innovation Scientist's awards / QC Professional Award : Quality life is possible by innovation only and the innovation is possible by research only, hence ANALYTICAL FOUNDATION is committed to identify such personalities for their contributions across various field of Science and Technology and awarding them yearly. To participate for award, send us your details of research / testing / publication at [info@analyticalfoundation.org](mailto:info@analyticalfoundation.org)

2. Improving quality of life by offering YOGA Training courses, Work shops / Seminars etc.

3. ANALYTICAL FOUNDATION aims to DETOXYFY human minds, souls and body by means of Yoga, Meditation, Ayurveda, Health Care, Awards, Media, Events, Camps etc.

## ►► Reach us @



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