



YASHRAJ
BIOTECHNOLOGY LTD.
a bio-quest for ever



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Dear Readers,

Welcome to our third newsletter of 2014 ! It's indeed a moment of great pleasure to release the third issue of YBL-Newsletter.

The second quarter of the year 2014 had series of events worth mentioning. We successfully purified antigen such as recombinant CKMM. Our cell culture unit was successful in generating the Monoclonal antibodies against CA 19-9. YBL also actively participated and co-sponsored an international conference on the 'Cellular and Molecular Mechanisms of Disease Progress'. YBL celebrated its 15th foundation day on 6th May 2014.

We are very proud of the high ratings we have been consistently receiving from our international customers about our products. We look forward to the opportunity to earn your trust and serve you for many more years to come.

Thank you for the support

(Arvind K. Bhanushali, Bharat T. Dagha, Paresh B. Bhanushali)
Promoter Directors

MSMB novel biomarker for Prostate cancer

MSMB is a human protein, encoded by the MSMB gene. It is also known as Prostate Secretory Protein 94 (PSP94). It is one of the major protein secreted from the prostate gland. Several studies suggest secretion of MSMB from other body tissues. Various elegant studies have suggested decreased level of MSMB in the seminal plasma as a biomarker for the prostate cancer.

Reference-

<http://www.ncbi.nlm.nih.gov/pubmed/19790236>

Editorial Board announcement

YBL is delighted to announce the editorial board of the YBL-Newsletter, This board will launch the YBL's quarterly newsletter. Aim of the board will be to write the newsletter in a way that can be appreciated by customers and the scientific community. Members of the editorial board are-

- Mr Paresh B Bhanushali -Chief Editor
- Dr. Mukesh Mani Tripathi -Editor
- Mr Subodh Gadgil -Member
- Dr Manoj Chugh -Member
- Mr Lakshminarayan -Member.



Recombinant Products

r-CKMM

Creatine Kinase MM is a an enzyme predominantly present in the muscles . CKMM is believed to be a reliable marker of skeletal muscles injuries. YBL has successfully expressed and solubilized the recombinant protein in *E.coli*, further attempts are being made to make it high pure. (Fig.1)



12% SDS PAGE Profile of CKMM

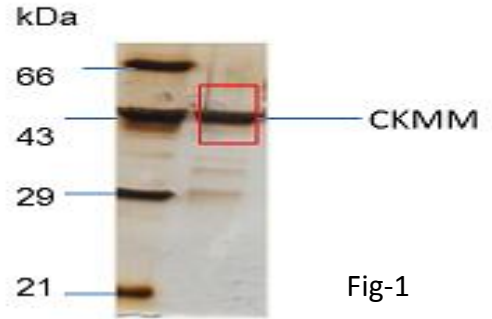


Fig-1

r-Galectin - 3

Gelectin-3 is a member of lectin family. Galectin-3 binds to a wide range of extracellular matrix proteins such as fibronectin, and laminin domains. Expression of Galectin-3 is seen in neutrophils, macrophages, mast cells, fibroblasts, and osteoclasts Plasma. Galectin-3 is a novel prognostic marker in patients with chronic heart failure. (Fig-2)

Route of Production: Recombinant

12 % SDS PAGE Profile of r-Galectin -3

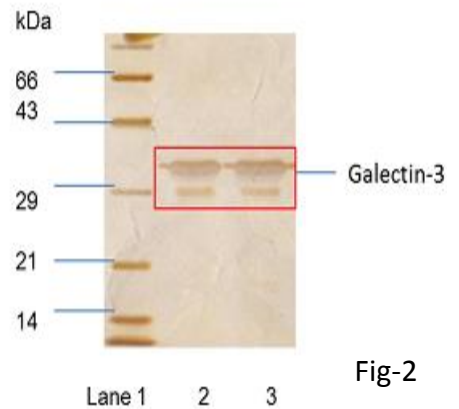
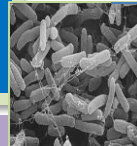


Fig-2



r-NSE

Neuron specific enolase is an enzyme of glycolytic pathway. This enzyme is released in the cerebrospinal fluid (CSF) during neuronal injury. It is also a very useful biomarker for detection of neuroblastoma in the tumor patients.(Fig-3)

Route of Production: Recombinant

12 % SDS PAGE Profile of r-NSE

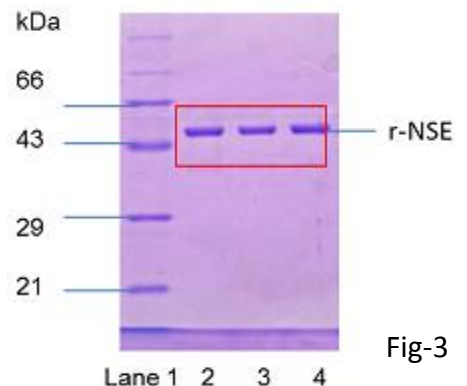


Fig-3



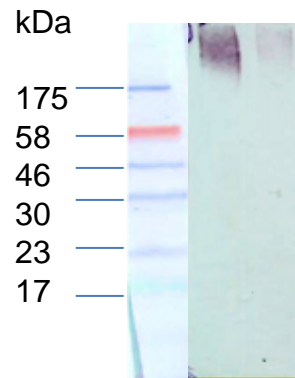
Upcoming Products from Cell Culture & Mab Unit

CA 19-9 Monoclonal antibodies

YBL cell culture unit has successfully generated mouse monoclonal antibodies against the CA 19-9. Cancer antigen 19-9 (CA 19-9) is associated with gastrointestinal cancer. Elevated level of CA 19-9 has been reported in various other complications such as a colorectal cancer, esophageal cancer and hepatocellular carcinoma. CA 19-9 is the most widely studied and validated serum biomarker for the diagnosis of pancreatic cancer. CA 19-9 serum levels can provide important information with regards to prognosis and overall survival. (Fig-4)



WB: CA 19-9 Mab



Lane 1 2 3

Fig-4

Lane 1: Marker

Lane 2: 1 KU of CA 19-9 Ag, Reduced

Lane 3: 1 KU of CA 19-9 Ag, Unreduced

YBL co-sponsored an International Conference



YBL got an opportunity to co-sponsor an International Conference on Cellular and Molecular Mechanism of Disease Processes held at Kashmir University from April 13-16, 2014.



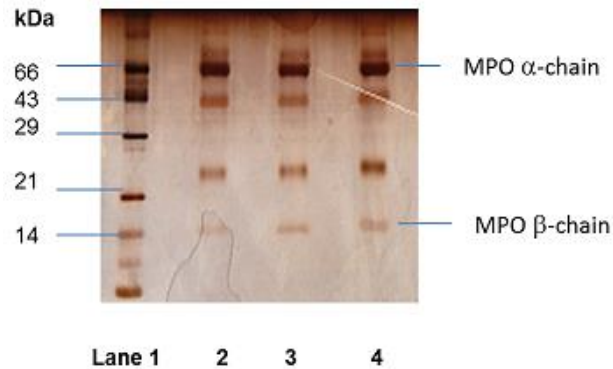
Native Products

Myeloperoxidase (MPO)

Myeloperoxidase is a heme containing peroxidase enzyme. In humans, it is secreted by neutrophils during the myeloid differentiation. MPO is considered as a prognostic marker for the chronic vascular inflammatory disease. (Fig-5)

Route of Production: Native

15% SDS PAGE Profile of MPO (High Pure)



Lane 1- Mol. Wt. Marker
Lane 2- 2µg Batch 1
Lane 3- 2µg Batch 2
Lane 4- 2µg Batch 3

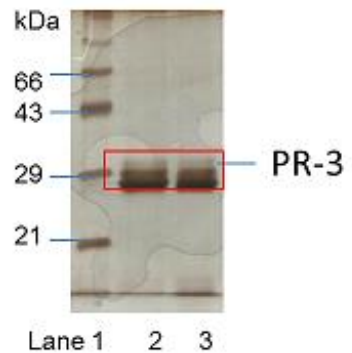
Fig-5

Proteinase-3 (PR3)

PR3 stands for Proteinase-3. PR3 belongs to the class of serine protease enzymes and its expression is seen in human neutrophils. PR-3 forms the epitope of anti-neutrophil cytoplasmic antibodies (PR3-ANCA). Anti PR-3ANCA are believed to be a serologic marker in inflammatory bowel disease. (Fig-6)

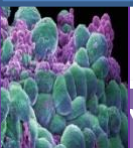
Route of Production: Native

12 % SDS PAGE Profile of PR-3



Lane 1- Mol. Wt. Marker
Lane 2- 2µg Batch 1
Lane 3- 2µg Batch 2
Lane 4- 2µg Batch 3

Fig-6



YBL-Top Cancer Markers

CA 15-3	Native
CA 19-9	Native
CA 72-4	Native
CA 125	Native
CEA	Native

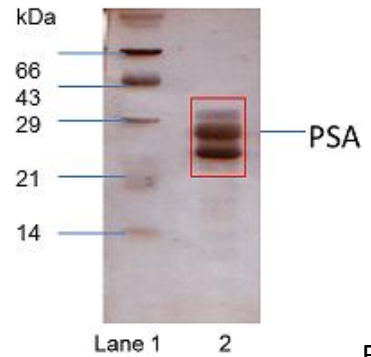


PSA (Prostate Specific Antigen)

PSA is major protein in the seminal plasma. An early characteristic feature of prostate carcinoma (PCa) is disruption of the basal cell layer and release of PSA from the prostate gland. The consequent increase due to disturbed architecture of epithelia is measured in the pathology labs using the PSA ELISA kits. PSA is a prognostic test for the prostate cancer. (Fig-7)

Route of Production: Native

12 % SDS PAGE Profile of PSA



Lane 1- Mol. Wt. Marker
Lane 2- 2µg Batch 1

Fig-7



Inquire Now



commitment to Quality is
our commitment to Life.



YBL-Foundation day

On 6th May 2014 Yashraj Biotechnology, celebrated its 15th Foundation day.

YBL, a premier supplier to Diagnostics (IVD) world

YBL is your trusted & premier supplier of high quality products with batch-to-batch consistency and shortest possible lead time. We can also customize the products in terms of technical specifications, COAs, packaging, logistics etc.

Send us an e-mail with an inquiry, comment or suggestions at

bharat@yashrajbio.com

For product information please visit us at <http://www.yashraj.com/>

- Top Image in the inset is production unit and bottom one is global business and marketing office (campus)

