



YASHRAJ
BIOTECHNOLOGY LTD.
a bio-quest for ever



Yashraj Biotechnology Newsletter

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Purification of IgE antibodies at YBL

IgE is the least abundant iso-type of antibodies present in mammals but plays a major role during the inflammatory responses. It has been shown to be involved in the immunity to parasites and protozoans. Recent research on IgE suggests that a huge population suffers with IgE mediated hyper inflammation. Most common allergens in IgE mediated hyper inflammation are pollen, mold, dust mites, food allergens, egg white and latexes.

IgE blood test is performed to check whether a person is allergic to a particular allergen.

Our cell culture team is in process of purifying the cell derived IgE from the secretory cell lines.

Dear Readers,

Welcome to the Yashraj Biotechnology Newsletter! It's indeed a moment of great pleasure to release the second issue of our Newsletter in 2015.

In the previous quarter of the year, we had several exciting events; we successfully finished the characterization studies of recombinant human Prolactin. We were also successful in generating the match pair antibodies against the CA-125. Further studies are on to understand the kinetics of the antigen-antibody binding & mapping down the epitope.

We have undertaken wide variety of purification projects, covering various domains of diseases areas e.g. recombinant TPO, P-53, IL-6 and Myoglobin.

We are delighted to share with you the launch of our new web page, which has been designed with a user-friendly navigation & updated with the latest information about our products.

Thank you for all your support.

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

Diagnostic importance of Galectin-3

Our R&D team published a review article in the IJPSRR. Our review highlights the diverse role of Galectin-3 in various diseases, various ligands of Galectin-3 and involvement in different cancers. Biology of Galectin-3 makes it an attractive target for the development of new strategies in the diagnosis of cancers and cardiovascular disease.

Congratulations!! to RDT team for the review article.



Human-Serum amyloid A (Catalog No: FrSAA-61)

Serum amyloid A (SAA) proteins comprise a family of apolipoproteins. These proteins play an important role in HDL metabolism and cholesterol homeostasis. Human SAA1 is a major acute phase protein that is highly expressed in response to inflammation and tissue injury. SAA is considered to be a biomarker for inflammation.

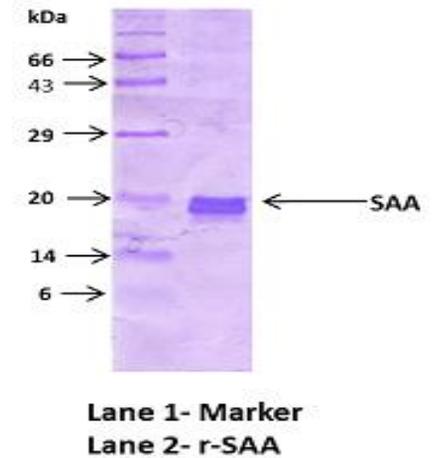
Technical Information:

Source: Recombinant (Transformed *E.coli*)

Accession: PODJI8 (122AA With N' His tag, 60: D→N; 71: H→R)

Buffer: 20mM Tris, 150 mM NaCl, 50% Glycerol, 1mM PMSF, pH 8.0

SDS-PAGE: r-SAA



Human Interleukin-18 (Cat No-FrIL18-31)

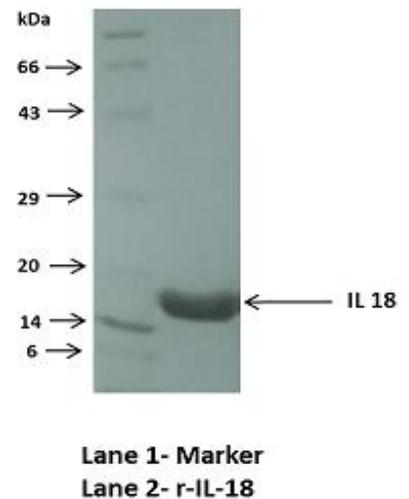
Interleukin 18 is a proinflammatory cytokine, which activates natural killer cell in spleen cells, and stimulates interferon gamma production in T-helper type I cells. IL-18 is a pleiotropic factor involved in the regulation of both innate and acquired immune responses; it plays a key role in autoimmune, inflammatory, and infectious diseases. Urinary IL-18 is an early predictive biomarker of acute kidney injury.

Technical Information:

Source: Recombinant (Transformed *E.coli*)

Accession: Q14116 **Buffer:** 10 mM phosphate buffer saline containing 20% glycerol

SDS-PAGE: r-IL18



Projects Initiated at YBL

Antigen	Route of Production	Species	Biomarker
Thyroid Peroxidase (TPO)	Recombinant	Human	Thyroid disorders
p53	Recombinant	Human	Carcinoma
Interleukin 6 (IL6)	Recombinant	Human	Inflammation
Myoglobin	Recombinant	Human	Muscular Injury



A1M (Catalog No: FAMhp-1)

A1M stands for Alpha-1-microglobulin. It belongs to lipocalin protein superfamily. A1M is synthesized mainly in the liver cells. Its major function is detoxification and clearance of the free radicals from the human body. Increased A1M in the urine is believed to be an indicator for proteinuria and other renal disorders.

Technical Information:**Form:** Liquid**Source:** Human urine**Buffer-** 50 mM PBS, 0.1 M NaCl, (pH 7.4 + 0.2), 0.09 % Sodium Azide**AFP (Catalog No -FAFhp-3)**

Alpha fetoprotein (AFP) is a protein usually produced by the liver and yolk sac of a developing foetus during pregnancy. AFP is currently being used as gold standard diagnostic biomarker for the Hepatocellular carcinoma (HCC). Elevated level of AFP level correlates with the presence of HCC.

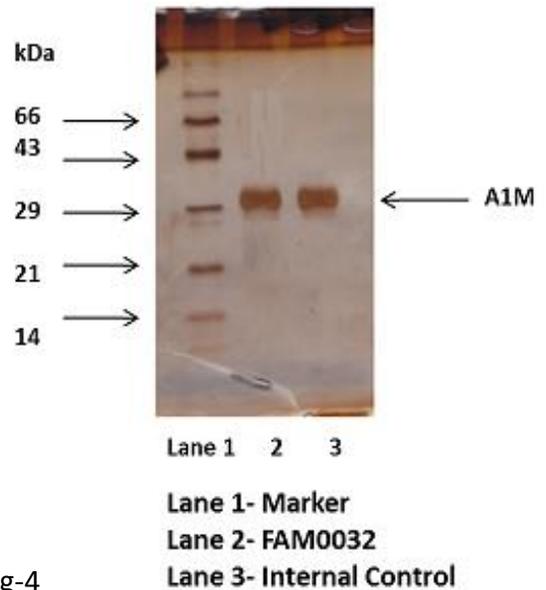
Technical Information:**Form:** Liquid**Source:** Human cord blood**Buffer:** 50 mM Tris & 150 mM NaCl, (pH 7.2 ± 0.2) containing 0.15 % Sodium Azide**SDS PAGE: A1M**

Fig-4

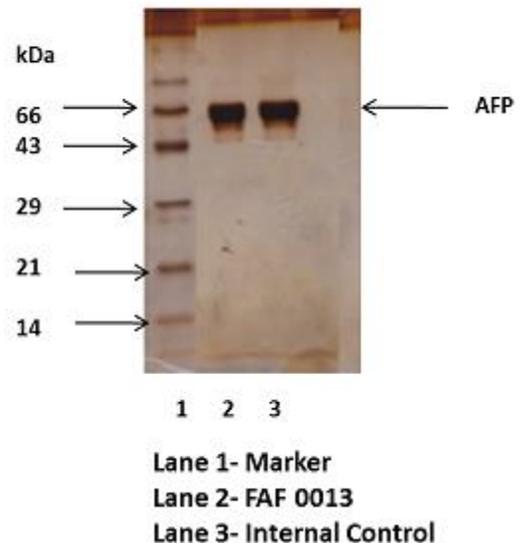
SDS PAGE: AFP

Fig-5

B2M: A Biomarker specific for proximal renal tubule Injury

An elegant study by Zhang et.al suggest that in acute kidney injury (AKI) patients with increased serum creatinine, measurement of urinary β 2-microglobulin can be useful tool to confirm the proximal renal tubule injury. Study also highlights the good correlation of high urinary β 2-microglobulin and KIM-1 staining for detection of proximal tubule injuries in renal patients. This study was published in Journal of Biomarker. <http://www.hindawi.com/journals/jbm/2014/492838/>



YBL-Top Cardiac/CVD Markers



YBL-Cardiac/CVD Markers	Route of Production
Galectin – 3	Recombinant
Troponin I	Recombinant
NT- Pro BNP	Recombinant
Pro- BNP	Recombinant
FABP-3	Recombinant
Apo-SAA	Recombinant
CRP	Native
Myeloperoxidase (MPO)	Native
D-Dimer	Native

Bulk Orders & Product Development at YBL

YBL is your trusted partner for supply of high quality Antigens and Antibodies of batch-to-batch consistency with shortest possible lead time, we can also offer the facility of customizing the products as per your specifications, such as buffer, COAs, packaging and logistics.

Besides the products which we regularly make, we can also do R&D and make new products for you with short turn-around time.

AACC 2015: Meeting

We are hoping for your presence in the annual gathering at 2015 AACC Annual Meeting & Clinical Expo.! With the greatest pleasure, we can meet you in this event.

AACC 2015: Our contact

Mr. B. T. Dagna
Director, Global Business Development
Yashraj Biotechnology, India

[E.mail-bharat@yashrajbio.com](mailto:bharat@yashrajbio.com)

Contact No- +919820641644

Please Meet us at- 2015 AACC
July 28–30, Georgia World Congress Center,
Atlanta, Georgia

Our New Website Has Been Launched!

We are pleased to announce that our new website is live. We have made a completely new layout with user friendly & navigation tool, we have also updated our products list with detailed technical information.

Send us an e-mail with an inquiry, comment or suggestions at bharat@yashrajbio.com

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



Better health through laboratory medicine.

