PROTEIN LAB SERVICE

GENOMINE, Inc.

Service item1 Glycoprotein staining service

Service item2 Deglycosylation 2-DE gel analysis

Service item3 Glycoprotein identification by PMF

Service item4 Glycoprotein identification by in gel deglycosylation

Service item5 2-DE gel analysis after Glycoprotein enrichment

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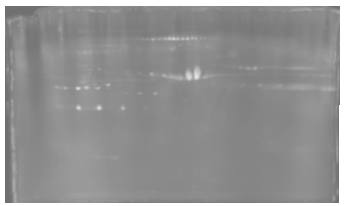
Service item1 2-DE gel analysis service with Glycoprotein staining

Cat. No. G8010
Price 30만원/sample

Step1 : **Proteome** : human plasma
Protein separation : 2-DE mini gel format
1st Dimension IEF : 4-10 NL IPG(12cm)
2nd Dimension slab gel : 8.5 X 8cm slab gel
Staining method :
staining Pro-Q Emerald 488 glycoprotein gel staining kit(Invitrogen)
Detection method : glycoprotein fluorescent emission (Ex/Em: 510/520nm) used filter : Ex/Em: Cy3/Cy3
Step2 : Multiple staining & spot matching
Step3: Differential display & Comparative analysis

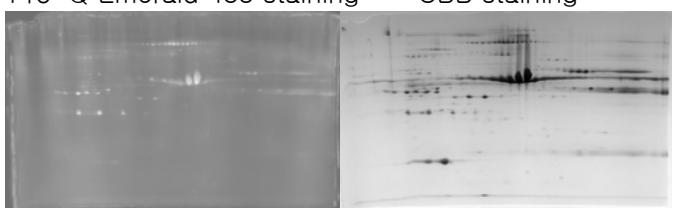
Step1



Proteome : total human plasma
Staining method : Pro-Q Emerald 488 glycoprotein gel staining kit(Invitrogen)
Protein separation : 2-DE mini gel format 1st Dimension IEF : 4-10 NL IPG(8.5cm)
Detection method : glycoprotein staining fluorescent emission (Ex/Em: 510/520nm)

Step2

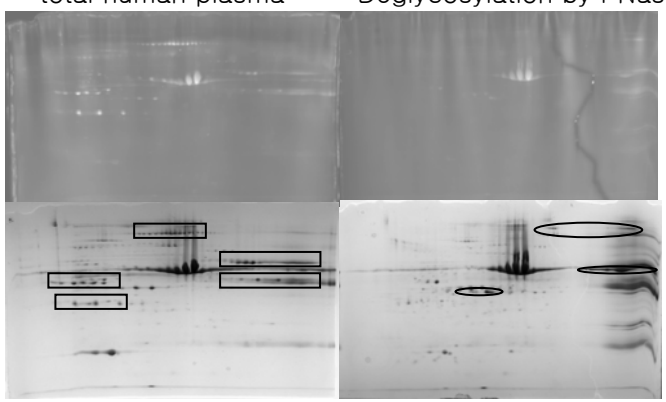
Pro-Q Emerald 488 staining CBB staining



Multiple staining & spot matching
total human plasma
IEF : 400ug protein from human plasma
Detection : Pro-Q Emerald 488 glycoprotein gel staining & CBB

Step3

total human plasma Deglycosylation by PNase F



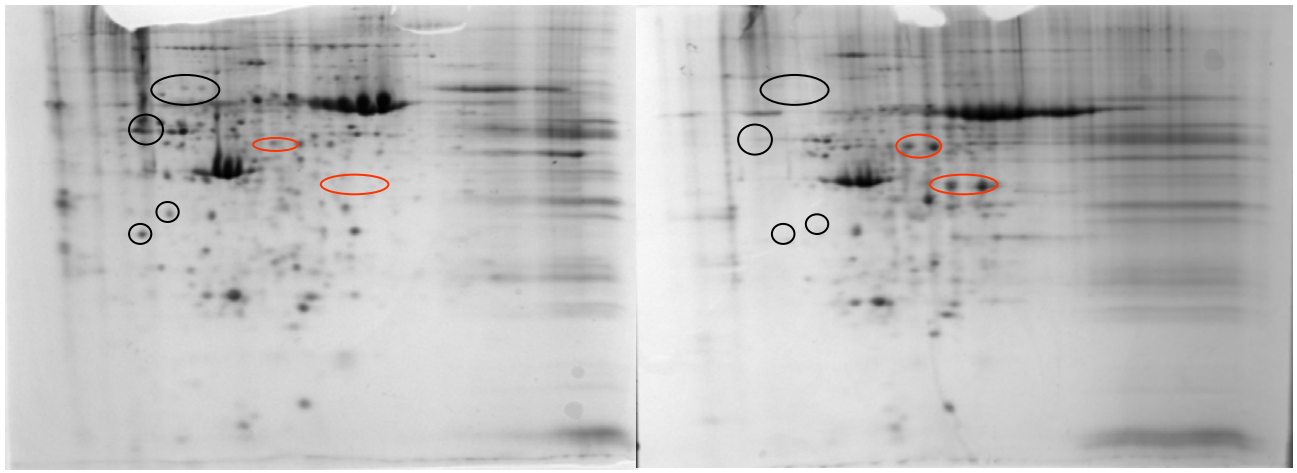
Differential display & Comparative analysist
total human plasma
IEF : 400ug protein from human plasma
Detection : Pro-Q Emerald 488 glycoprotein gel staining & CBB
Rectangle box: disappear spot after PNGase F treatment
oval box: appear spot after PNGase F treatment

Service item2 2-DE gel analysis after deglycosylation (Only one deglycosylation enzyme choice)

Cat. No. G8020
Price 28만원/sample

Kidney cancer tissue total lysate

Deglycosylaton by PNGase F



Proteome : Kidney cancer tissue
Protein separation : 2-DE mini gel format
1st Dimension IEF : 4-10 NL IPG(12cm)
2nd Dimension slab gel : 8.5 X 8cm slab gel
Staining method :
CBB staining
Deglycosylation enzyme: PNGase F(sigma)
Step2 : Multiple staining & spot matching
Step3: Differential display & Comparative analysis

Black circle: disappear spot after PNGase F treatment

Red circle: appear spot after PNGase F treatment,

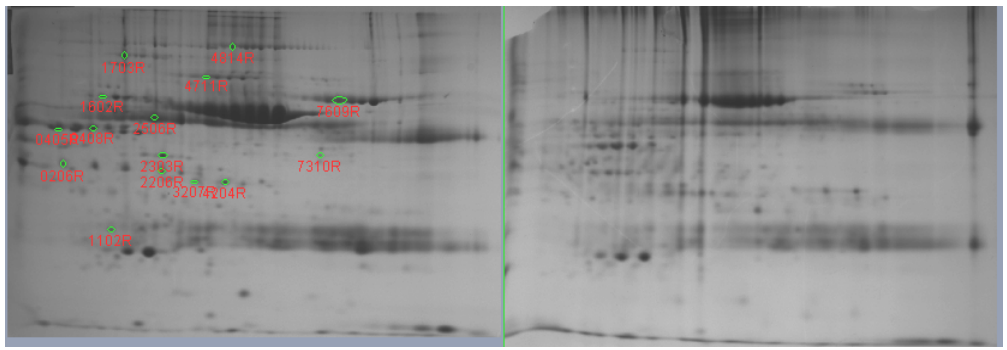
Service item3 Glycoprotein identification by Peptide mass fingerprinting (Only one deglycosylation enzyme choice)

This service give rise to protein identification and/or candidates of possible glycoproteins

Cat. No. G8030
Price 5만원/sample

total human plasma

Deglycosylation by PNase F



Step1 : Protein identification by peptide mass fingerprinting

SSP	Protein identification	pI	MW
206	haptoglobin	6.1	25.73
405	alpha-1-antitrypsin	5.5	46.99
408	alpha-1-antitrypsin	5.5	46.99
1102	C4B3	5.8	47.95
1602	alpha-1-B-glycoprotein	5.6	52.49
1703	ceruloplasmin (ferroxidase), isoform CRA_b	5.5	123.84
2206	haptoglobin	6.3	38.95
2303	CD5 antigen-like precursor	5.3	39.61
2506	immunoglobulin alpha-1 heavy chain constant region	6.1	38.42
3207	alpha-1-antitrypsin	5.4	46.86
4711	albumin preproprotein	5.6	67.2
4204	alpha-1-antitrypsin	5.4	46.86
4811	albumin preproprotein	5.9	71.35
4814	unnamed protein product	5.1	57.43
7310	Ig mu chain C region	6.4	50.14
7609	Chain A, Apo-Human Serum Transferrin (Glycosylated	6.9	77.02

Step2 : Prediction of possible glycoslyate peptide by peptide mass matching for glycosylation modification

SSP 1602 alpha-1-beta-glycoprotein

NetNGlyc 1.0 Server (http://www.cbs.dtu.dk/services/NetNGlyc/)

Service item4 Glycoprotein identification by in gel deglycosylation

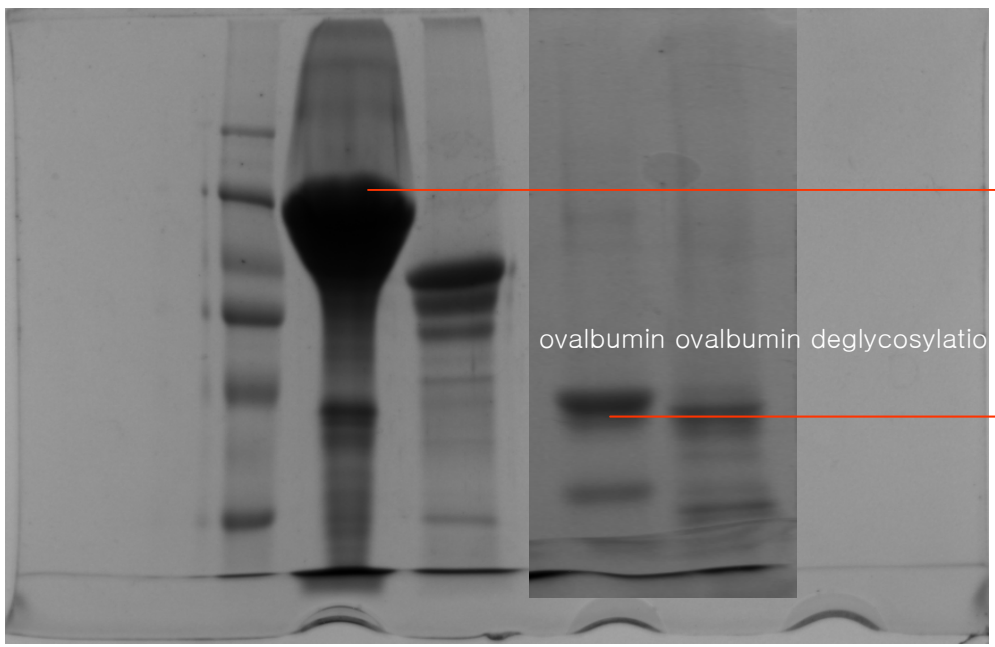
Cat. No. G8040
Price 12만원/sample

Step1: Fetuin & ovalbumin deglycosylation by PNGase F treatment in solution
Step2 : Glyco & Deglycosylation protein by SDS-PAGE

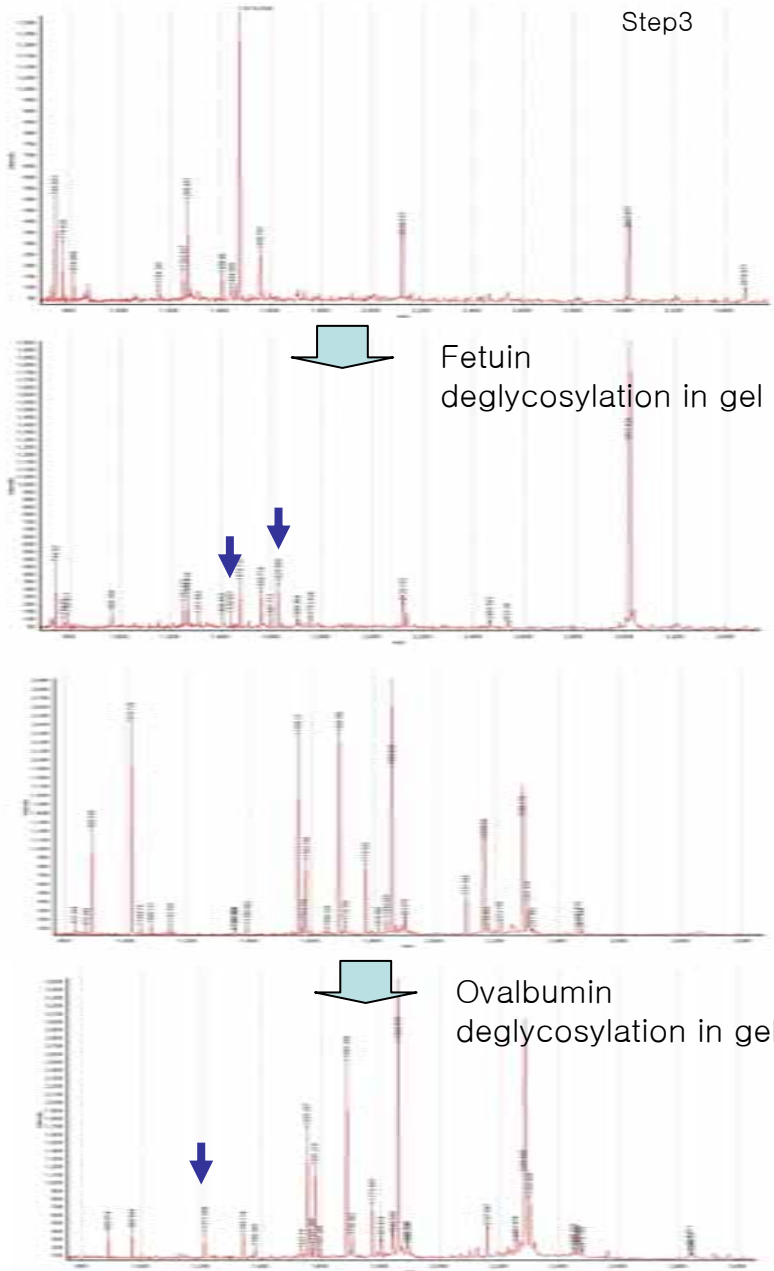
Step3 : Fetuin & ovalbumin deglycosylation by PNGase F treatment in gel by MALDI-TOF analysis

Step1,2

Fetuin Fetuin deglycosylation in solution(PNGase F)



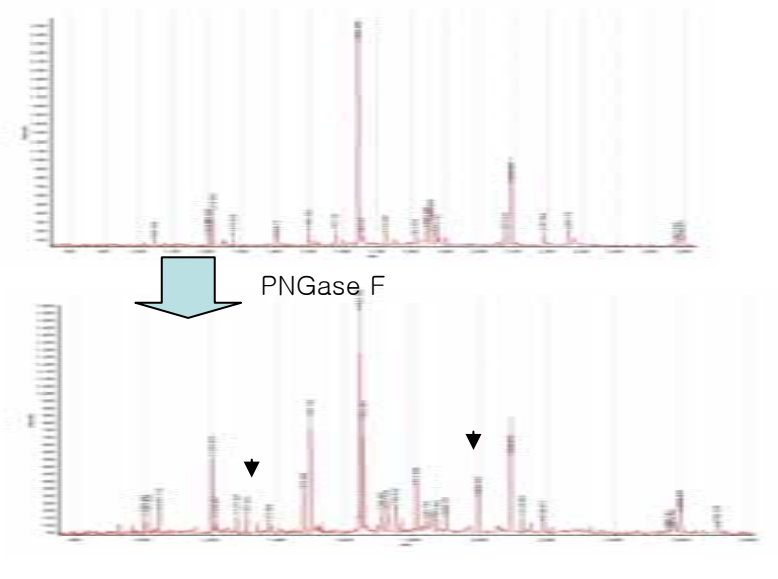
Step3



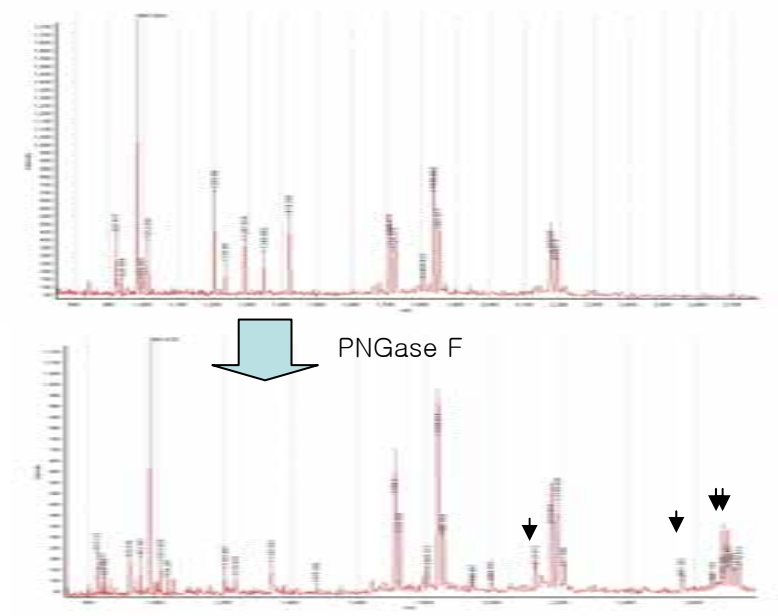
Fetuin deglycosylation in gel

Ovalbumin deglycosylation in gel

408 gi|151302818|emb|CAJ15161.1| alpha-1-antitrypsin

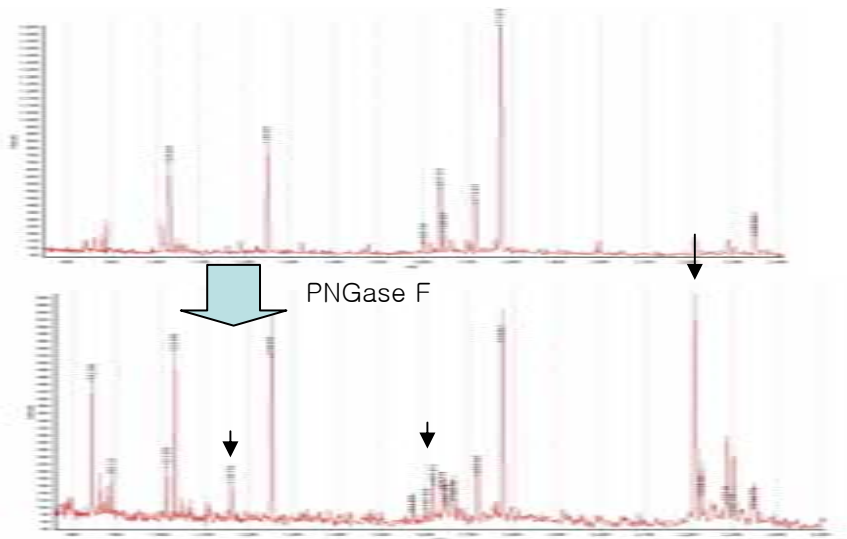


206 gi|3337390|gb|AAC27432.1| haptoglobin

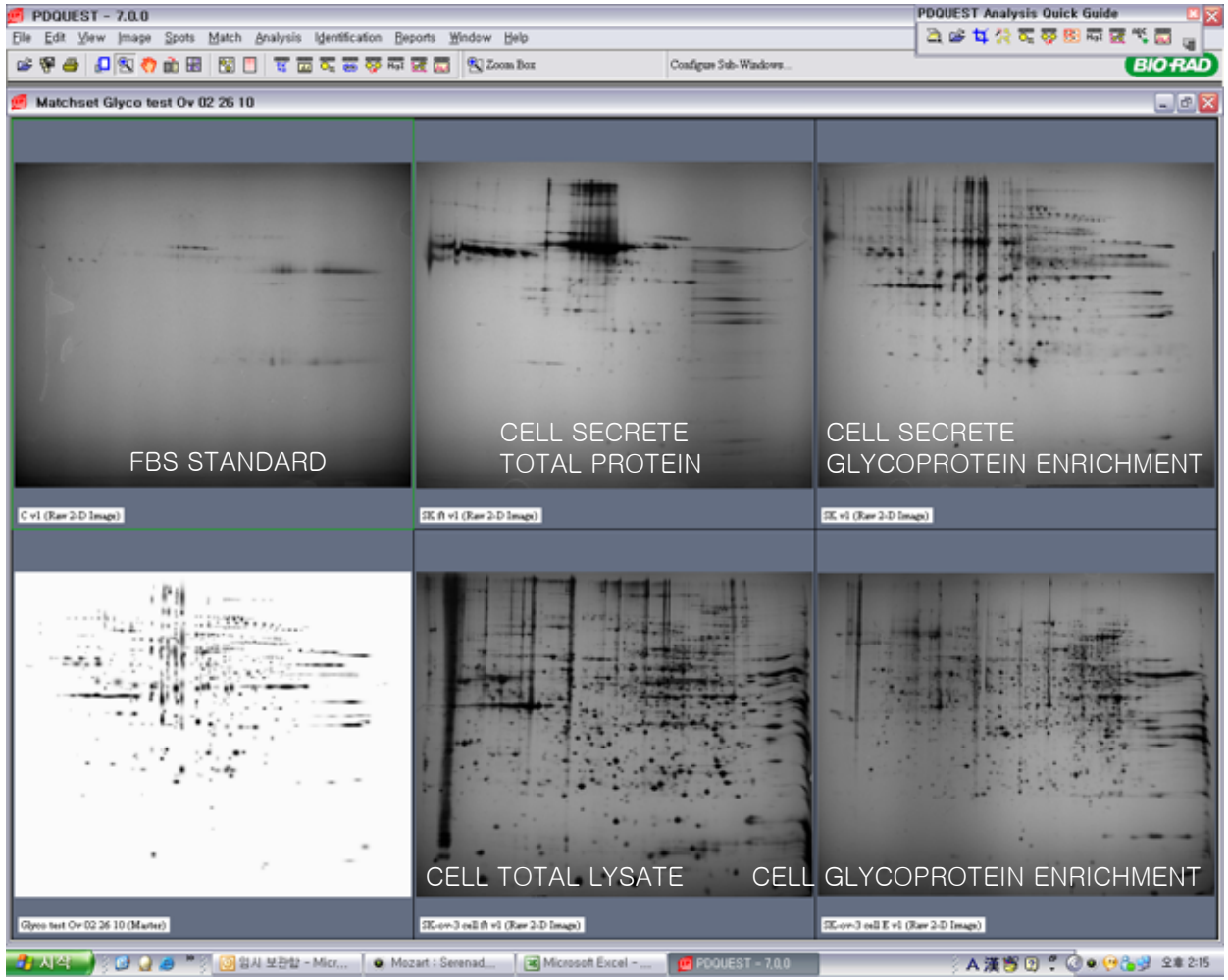


MALDI-TOF MS analysis of in gel deglycosylation by PNGase F

4811 gi|168988718|pdb|2VDB|A Chain A, Structure Of Human Serum Albumin With S-Naproxen And The Ga Module



Service item5 2-DE gel analysis after Glycoprotein enrichment



Cat. No. G8050
Price 36만원/sample

Step : **Proteome** : sk-ov-3 cell
Protein separation : 2-DE 24cm large gel format
1st Dimension IEF : 4-10 NL IPG(24cm)
2nd Dimension slab gel : 24 X 20cm slab gel
Glycoprotein enrichment :Glycoprotein Enrichment Resin (clontech)
Glycoprotein staining: **Gel Staining method** :silver & CBB
ProQ Emerald 488 Glycoprotein stain kit (Molecular Probes)