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Glyco(proteo)mic workflows for cancer biomarker discovery

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Citation

Moran, A. B. (2023, November 1). *Glyco(proteo)mic workflows for cancer biomarker discovery*. Retrieved from <https://hdl.handle.net/1887/3655862>

Version: Publisher's Version

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Note: To cite this publication please use the final published version (if applicable).

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List of Abbreviations

2-AA	2-Aminobenzoic acid	DTT	Dithiothreitol
2-AB	2 Aminobenzamide	E	Ethyl esterified α 2,6-linked <i>N</i> -acetylneuraminic acid
2-PA	2-Aminopyridine	EDC	1-ethyl-3-(3-(dimethylamino) propyl) carbodiimide
AAL	Aleuria aurantia lectin	EDTA	Ethylenediaminetetraacetic acid
AGP	Alpha-1-acid glycoprotein	EEA	Ethyl esterification and amidation
Ala	Alanine (A)	EIC	Extracted ion chromatogram
Am	Amidated α 2,3-linked <i>N</i> -acetylneuraminic acid	EIE	Extracted ion electropherogram
Arg	Arginine (R)	ELISA	Enzyme-linked immunosorbent assay
Asn	Asparagine (N)	EOF	Electroosmotic flow
AUC	Area under the curve	ER	Endoplasmic reticulum
BFS	Bare fused silica	ESI	Electrospray ionization
BGE	Background electrolyte	ETD	Electron-transfer dissociation
BPH	Benign prostate hyperplasia	EtOH	Ethanol
BPSA	Benign prostate-specific antigen	F	Fucose
CE	Capillary electrophoresis	FA	Formic acid
CEA	Carcinoembryonic antigen	FcγRIIIA	Fc-gamma receptor IIIA
CESI	Capillary electrophoresis-electrospray ionization	FDA	Food and Drug Administration
CID	Collision-induced dissociation	FLR	Fluorescence
CRC	Colorectal cancer	FWHM	Full width half maximum
CV	Coefficient of variation	GaINAc	<i>N</i> -acetylgalactosamine
CZE	Capillary zone electrophoresis	GlcNAc	<i>N</i> -acetylglucosamine
DEN	Dopant enriched nitrogen	Glu	Glutamate (E)
DMT-MM	4-(4,6-Dimethoxy-1,3,5-triazin-2-yl)-4-methyl morpholinium chloride		
DRE	Digital rectal examination		

Gly	Glycine (G)	N	<i>N</i> -acetylhexosamine
H	Hexose	NaCl	Sodium chloride
HAc	Glacial acetic acid	NaOH	Sodium hydroxide
HCl	Hydrochloric acid	o.d	Outer diameter
HILIC	Hydrophilic interaction liquid chromatography	PBM	Protein Binding Membrane
HOBt	Hydrate 1- hydroxybenzotriazole	PBS	Phosphate buffered saline
HPAEC-	High-pH/performance	PCa	Prostate cancer
PAD	anion-exchange chromatography-pulsed anomeric detection	PCA	Principal component analysis
i.d	Internal diameter	PCR	Polymerase chain reaction
IAA	Iodoacetamide	PEI	Polyethylenimine
ICC	Ion charge control	PGC	Porous graphitized carbon
IMS	Ion-mobility mass spectrometry	pH	Potential of Hydrogen
KLK	Kallikrein	Phe	Phenylalanine (F)
LC	Liquid chromatography	PNGase F	Peptide- <i>N</i> -glycosidase F
LLOQ	Lower limit of quantification	Pro	Proline (P)
LST	Sialyllacto- <i>N</i> -tetraose	PROC	Procainamide
Lys	Lysine (K)	proPSA	Precursor protein of prostate-specific antigen
<i>m/z</i>	Mass to charge ratio	PSA	Prostate-specific antigen
MALDI	Matrix-assisted laser desorption ionization	PTM	Post-translational modification
MGAT	<i>N</i> -acetylglucosaminyl transferase	QTOF	Quadrupole time-of-flight
MQ	Milli-Q deionized water	RNA	Ribonucleic acid
MRM	Multiple reaction monitoring	ROC	Receiver operating characteristic
MS	Mass spectrometry	RPLC	Reversed-phase liquid chromatography
MS/MS	Tandem mass spectrometry	RSD	Relative standard deviation
		RT	Retention time
		S	Sialic acid
		S/N	Signal-to-noise ratio

Appendices

SDS- PAGE	Sodium dodecyl-sulfate polyacrylamide gel electrophoresis	UPLC	Ultra performance liquid chromatography
Ser	Serine (S)	UV	Ultraviolet
Thr	Threonine (T)	XIC	Extracted ion chromatogram
UHPLC	Ultra-high performance liquid chromatography	XIE	Extracted ion electropherogram
UHRMS	Ultra-high resolution mass spectrometry		

