

Matrix (Abbrev)	Matrix Full Name	Application	Reference(s)
ANP	2-amino-5-nitropyridine	Oligonucleotides < 20 Bases, MALDI(-)	Anal. Chem. 1993, 65, 3204-3211 Rapid Commun.Mass Spectrom. 1996, 10(8), 907-10
80/20 AA/NA	80% anthranilic acid + 20% nicotinic acid	Oligonucleotides < 20 Bases, MALDI(+ & -)	Rapid Commun.Mass Spectrom. 1992, 6, 771-776. J Am Soc Mass Spectrom 2000, 11, 854-865
6-ATT	6-aza-2-thiothymine	Oligonucleotides and Carbohydrates, MALDI(-)	J. Am. Soc. Mass Spectrom. 1995, 6,972-975. ( <i>Oligos</i> ) Anal. Chem. 1996, 68, 3215-23. ( <i>Glycans</i> )
3-HPA	3-Hydroxypicolinic acid (3-HPA)	Oligonucleitodes 1kDa - 30 kDa	Anal. Chem. 1994, 66, 1637-1645. Nucleic Acids Research. 2001, 29,19 ( <i>sugar &amp; ammonium salts additives to matrix</i> ) Anal. Chem. 2000, 72, 3860-3866 ( <i>sample prep, used of ammonium salts &amp; fructose as additive</i> )
2,3,4 THAP	2,3,4-trihydroxyacetophenone	Oligionucleitodes, <6 kDa	Rapid Commun.Mass Spectrom. 1996, 10, 383-388.
2,4,6 THAP	2,4,6-trihydroxyacetophenone	Oligionucleitodes, <6 kDa	Rapid Commun.Mass Spectrom. 1996, 10, 383-388. Nucleic Acids Res. 1991, 21, 3191-3196. Anal. Chem. 2000, 72, 3860-3866 ( <i>use of ammonium salts &amp; fructose as additive</i> )
AMN	2-amino-4-methylh5-nitropyridine	Peptides/Proteins <12kDa w/ acidic residues, MALDI(-)	Anal. Chem. 1993, 65, 3204-3211
CHCA	a-cyano-4-hydroxycinnamic acid	Peptides/Proteins < 6kDa	Org. Mass Spectrom. 1992, 27, 156-158. JASMS (1999), 10(1), 35-44 ( <i>Ammonium salts matrix additive</i> ) Anal. Chem. 2001, 73, 434-438. ( <i>sample prep</i> ) Rapid Commun. Mass Spectrom. 1996, 10, 923-926 ( <i>comatrix/matrix additive 3-aminoquinoline</i> ) Anal. Chem. 2001, 73, 3679-3686. ( <i>comatrix/matrix additive aniline</i> )
CICCA (note)*	4-chloro-alpha-cyanocinnamic acid *(not commercially available currently)	Peptides/Proteins < 6kDa	PNAS(USA). 2008, 105, 12200-12205 Journal of Proteome Research (2010), 9(4), 1931-1940. ( <i>sample prep optimization_GOOD REFS</i> )
SDHB	9:1 mixture of 2,5-DHB and 2-hydroxy-5-methoxybenzoic acid	Peptides/Proteins > 3kDa; Carbohydrates; Carbohydrates	European journal of mass spectrometry (2004), 10(4), 487-93 PNAS(USA). 1997, 94(5), 1629-1633 ( <i>glycans, oligosaccharide derivitization, DHB co-matrices, superDHB</i> ) JASMS (2002), 13(8), 975-984 ( <i>superDHB prep, also effect of laser power and duration on MALDI spectra</i> )
SA	Sinapinic Acid 3,5-Dimethoxy-4-hydroxycinnamic acid	Peptides/Proteins > 3kDa; Polymers Polar	Anal. Chem., 1990, 62: 1836-1840. <a href="http://www.proteochem.com/protocols/Sinapinic-Acid-Product-Information-Sheet.pdf">http://www.proteochem.com/protocols/Sinapinic-Acid-Product-Information-Sheet.pdf</a> ( <i>Matrix prep</i> ) J Am Soc Mass Spectrom 1998, 9, 1303-1310 ( <i>SA for polymer analysis</i> )
2,5 DHB	2,5-dihydroxybenzoic acid	Peptides/Proteins > 3kDa; Polymers Polar; Carbohydrates	Int. J. Mass Spectrom. Ion Processes 1991, 111, 89-102. J. Am. Chem. Soc. 1995, 117, 6048. J. Am. Soc. Mass Spectrom (1999), 10(1), 35-44 ( <i>Ammonium salts matrix additive</i> ) PNAS(USA). 1997, 94(5), 1629-1633 ( <i>glycans, oligosaccharide derivitization, DHB co-matrices, superDHB</i> ) J. Am. Soc. Mass Spectrom,12, 6, 732-743 ( <i>DHB in Polymer analysis:use of Ag salts</i> )
2,5 DHAP	2',5',-Dihydroxyacetophenone	Peptides/Proteins 8kDa - 100 kDa; Carbohydrates; Glycoproteins	Rapid Commun. Mass Spectrom. 2006; 20: 785-789

DCTB	2-[(2 E)-3-(4-tert-butylphenyl)-2-methylprop-2-enylidene]malononitrile	Fullerenes	International Journal of Mass Spectrometry (2001), 210/211(1-3), 249-263 ( <i>fullerene matrix optim.</i> )
IAA	trans-3-indoleacrylic acid	Polymers non-Polar	J. Am. Soc. Mass Spectrom. 1996, 7, p11 J Am Soc Mass Spectrom 1998, 9, 1303–1310 ( <i>IAA for ply styrene</i> )
DIT	1,8,9-anthracenetriol (dithranol),	Polymers non-Polar	J. Am. Soc. Mass Spectrom. 1996, 7, 11 J. Am. Soc. Mass Spectrom,12, 6, 732-743 ( <i>Polymer analysis:use of Ag salts</i> )
HABA	4'-Hydroxyazobenzene-2-carboxylic acid	Polymers non-Polar	J. Am. Soc. Mass Spectrom,12, 6, 732-743 ( <i>Polymer analysis:use of Ag salts</i> )
DMAN	1,8-bis(dimethyl-amino)naphthalene	Small Molecules, Anionic Analytes, MALDI(-)	Anal. Chem. 2009, 81, 7954–7959