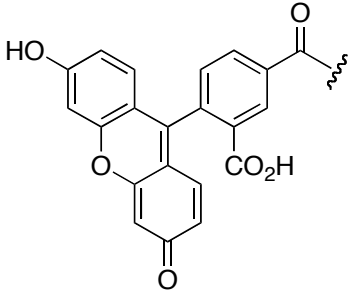
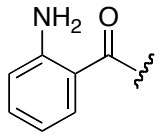
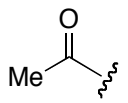
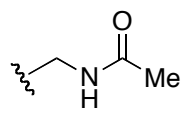
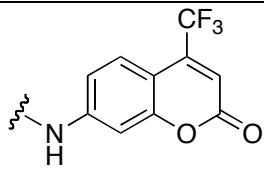
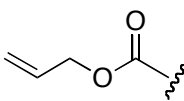
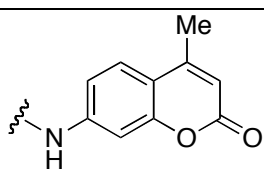
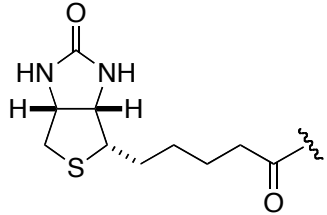
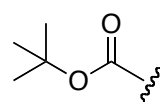
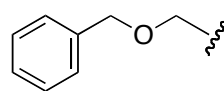
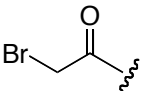
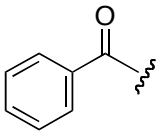
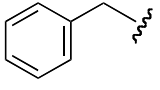
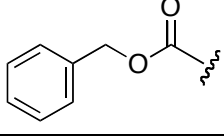
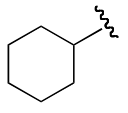
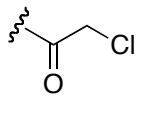
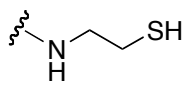
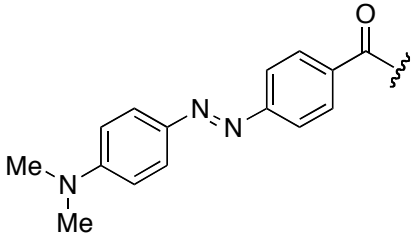
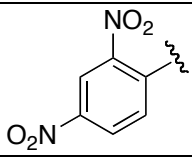
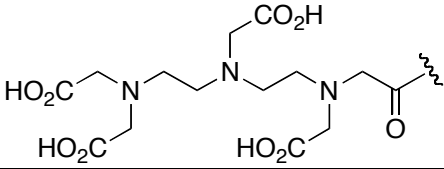


Labelling and Protecting Groups

Symbol	Name	Structure	Formula	M.W.
5-FAM	5-Carboxyfluoresceinyl		C ₂₁ H ₁₁ O ₆	359.3
Abz	2-Aminobenzoyl (Anthraniloyl)		C ₇ H ₆ NO	120.1
Ac	Acetyl		C ₂ H ₃ O	43.0
Acm	Acetamidomethyl		C ₃ H ₆ NO	72.1
AFC	7-Amido-4-trifluoromethyl-coumaryl		C ₁₀ H ₅ F ₃ NO ₂	228.2
Alloc (Aloc)	Allyloxycarbonyl		C ₄ H ₅ O ₂	85.1
AMC	7-Amido-4-methylcoumaryl		C ₁₀ H ₈ NO ₂	174.2
Biotin	D-Biotinyl (+)-Biotinyl		C ₁₀ H ₁₅ N ₂ O ₂ S	227.3
Boc (tBoc)	<i>tert</i> -Butoxycarbonyl		C ₅ H ₉ O ₂	101.1
Bom	Benzyloxymethyl		C ₈ H ₉ O	121.2

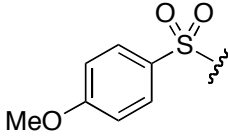
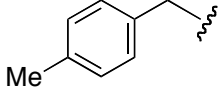
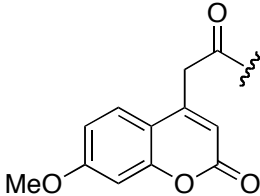
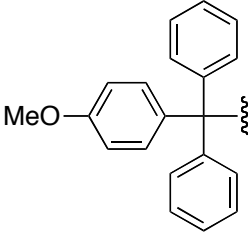
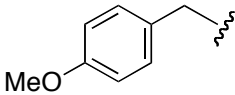
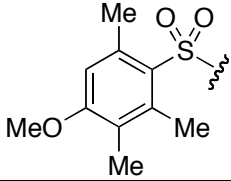
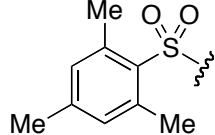
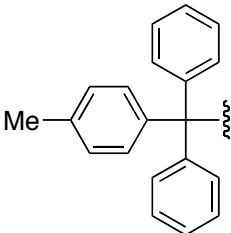
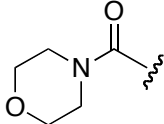
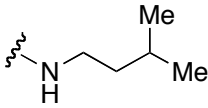
Labelling and Protecting Groups

Symbol	Name	Structure	Formula	M.W.
Br-Ac	2-Bromoacetyl (Br-acetylation)		C ₂ H ₂ BrO	121.9
Bz	Benzoyl		C ₇ H ₅ O	105.1
Bzl (Bn)	Benzyl		C ₇ H ₇	91.1
Cbz (Z)	Benzyloxycarbonyl		C ₈ H ₇ O ₂	135.1
cHex (Cy)	Cyclohexyl		C ₆ H ₁₁	83.2
CMK	Chloromethylketone (replaces the C-terminal CO ₂ H group)		C ₂ H ₂ ClO	77.5
Cya	Cysteamidyl (Cysteamide)		C ₂ H ₆ NS	76.1
DABCYL	4-(4-Dimethylaminophenyl-azo)benzoyl		C ₁₅ H ₁₄ N ₃ O	252.3
DNP	2,4-Dinitrophenyl		C ₆ H ₃ N ₂ O ₄	167.1
DTPA	Diethylenetriaminepentaacetyl		C ₁₄ H ₂₂ N ₃ O ₉	376.3

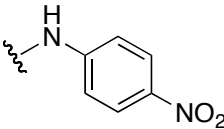
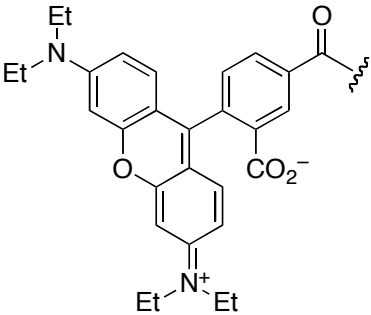
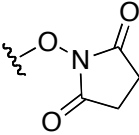
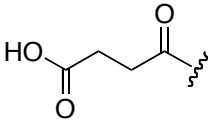

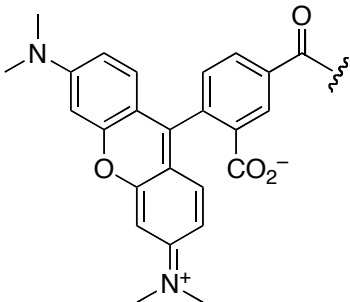
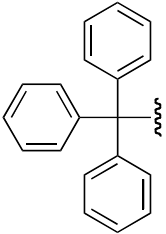
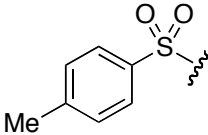
Labelling and Protecting Groups

Symbol	Name	Structure	Formula	M.W.
EDANS	5-[(2-Aminoethyl)amino]-naphthalene-1-sulfonic acid		C ₁₂ H ₁₃ N ₂ O ₃ S	265.3
FITC	Fluorescein isothiocyanate (isothiocyanate reacts with nucleophiles to give the generic product shown)		C ₂₁ H ₁₂ NO ₅ S	390.4
Fm	Fluorenylmethyl		C ₁₄ H ₁₁	179.2
FMK	Fluoromethylketone (replaces the C-terminal CO ₂ H group)		C ₂ H ₂ FO	61.0
Fmoc	9-Fluorenylmethyloxycarbonyl		C ₁₅ H ₁₁ O ₂	223.3
For	Formyl		CHO	29.0
Glu-(EDANS)-NH ₂	(S)-5-(2-(5-Amino-4-(methylamino)-5-oxopentanamido)ethylamino)-naphthalene-1-sulfonic acid		C ₁₇ H ₂₁ N ₄ O ₅ S	393.4
HYNIC	6-Hydrazinopyridine-3-carbonyl		C ₆ H ₆ N ₃ O	136.1
LC	6-Amidohexanoyl		C ₆ H ₁₁ NO	113.2

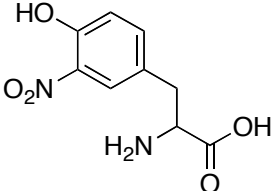
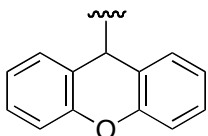
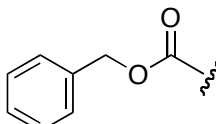
Labelling and Protecting Groups

Symbol	Name	Structure	Formula	M.W.
Mbs	4-Methoxybenzenesulfonyl		C ₇ H ₇ O ₃ S	171.2
MBzl	4-Methylbenzyl		C ₈ H ₉	105.2
MCA	(7-Methoxycoumarin-4-yl)acetyl		C ₁₂ H ₉ O ₄	217.2
Mmt	4-Methoxytrityl		C ₂₀ H ₁₇ O	273.4
Mob (PMB)	4-Methoxybenzyl (<i>para</i> -methoxybenzyl)		C ₈ H ₉ O	121.2
Mtr	4-Methoxy-2,3,6-trimethyl- benzenesulfonyl		C ₁₀ H ₁₃ O ₃ S	213.3
Mts	Mesitylene-2-sulfonyl		C ₉ H ₁₁ O ₂ S	183.3
Mtt	4-Methyltrityl		C ₂₀ H ₁₇	257.4
Mu	4-Morpholinecarbonyl		C ₅ H ₈ NO ₂	114.1
NHisopen	Amido- <i>iso</i> -pentane		C ₅ H ₁₂ N	86.2

Labelling and Protecting Groups

Symbol	Name	Structure	Formula	M.W.
pNA	<i>para</i> -Nitroanilide		C ₆ H ₅ N ₂ O ₂	137.1
RB	Rhodamine B (N-terminus)		C ₂₉ H ₂₉ N ₂ O ₄	469.6
Su	<i>N</i> -Hydroxysuccinimide		C ₄ H ₄ NO ₃	114.1
Suc	Succinyl		C ₄ H ₅ O ₃	101.1
tBu	<i>tert</i> -Butyl		C ₄ H ₉	57.1
TMR (5-TAMRA)	5-Carboxytetramethyl-rhodaminy		C ₂₅ H ₂₁ N ₂ O ₄	413.5
Trt (Tr)	Tryl		C ₁₉ H ₁₅	243.3
Ts (Tos)	Tosyl (4-Toluenesulfonyl)		C ₇ H ₇ O ₂ S	155.2

Labelling and Protecting Groups

Symbol	Name	Structure	Formula	M.W.
Tyr(3-NO ₂)	3-Nitrotyrosine		C ₉ H ₁₀ N ₂ O ₅	226.2
Xan	Xanthyl		C ₁₃ H ₉ O	181.2
Z (Cbz)	Benzyloxycarbonyl		C ₈ H ₇ O ₂	135.1