

## **List of Abbreviations**

|              |                                                      |
|--------------|------------------------------------------------------|
| PTM          | Post Translational Modifications                     |
| AR           | Androgen Receptor                                    |
| UPP          | Ubiquitin Proteasome Pathway                         |
| UPS          | Ubiquitin Proteasome System                          |
| APF-1        | ATP-dependent Proteolysis Factor 1                   |
| UBD          | Ubiquitin Binding Domain                             |
| USP          | Ubiquitin-Specific Protease                          |
| Uba1/Ube1/E1 | Ubiquitin Activating Enzyme                          |
| DUB          | De-Ubiquitinating Enzyme                             |
| ER           | Endoplasmic Reticulum                                |
| ERAD         | Endoplasmic Reticulum-Associated protein Degradation |
| MoaD         | Subunit 1 of molybdopterin converting factor         |
| ThiS         | Thiamine biosynthesis protein S                      |
| MoeB         | Molybdopterin-synthase adenylyltransferase           |
| ThiF         | Sulfur carrier protein ThiS adenylyltransferase      |
| ts           | temperature sensitive                                |
| XL-SMA       | X-Linked infantile Spinal Muscular Atrophy           |
| HMW-mHtt     | High Molecular Weight mutant Huntington              |
| Ubc1/E2      | Ubiquitin Conjugating Enzyme                         |
| E3           | Ubiquitin Ligase                                     |
| HECT         | Homologous to E6-AP Carboxy-Terminus                 |
| RING         | Really Interesting New Gene                          |
| E6AP         | E6 Associated Protein                                |
| HPV          | Human PapillomaVirus                                 |
| Ub           | Ubiquitin                                            |
| CP           | Core Particle                                        |
| UFD pathway  | Ubiquitin Fusion Pathway                             |
| RP           | Regulatory Particle                                  |
| kDa          | KiloDalton                                           |

|      |                                               |
|------|-----------------------------------------------|
| bp   | Basepair                                      |
| ANS  | 1-Anilino 8-naphthalene sulphonic acid        |
| IAD  | Inactive Adenylation Domain                   |
| FCCH | First Catalytic Cysteine Half-domain          |
| 4HB  | Four Helix Bundles                            |
| AAD  | Active Adenylation Domain                     |
| SCCH | Second Catalytic Cysteine Half-domain         |
| UFD  | Ubiquitin Fold Domain                         |
| IPTG | Isopropyl $\beta$ - d-1-thiogalactopyranoside |
| LB   | Luria Broth                                   |
| CD   | Circular Dichroism                            |
| FRET | Fluorescence Resonance Energy Transfer        |

## List of Amino Acids Abbreviations

| <i>Amino acid</i>           | <i>Three-letter abbreviation</i> | <i>One-letter symbol</i> |
|-----------------------------|----------------------------------|--------------------------|
| Alanine                     | Ala                              | A                        |
| Arginine                    | Arg                              | R                        |
| Asparagine                  | Asn                              | N                        |
| Aspartic acid               | Asp                              | D                        |
| Asparagine or aspartic acid | Asx                              | B                        |
| Cysteine                    | Cys                              | C                        |
| Glutamine                   | Gln                              | Q                        |
| Glutamic acid               | Glu                              | E                        |
| Glutamine or glutamic acid  | Glx                              | Z                        |
| Glycine                     | Gly                              | G                        |
| Histidine                   | His                              | H                        |
| Isoleucine                  | Ile                              | I                        |
| Leucine                     | Leu                              | L                        |
| Lysine                      | Lys                              | K                        |
| Methionine                  | Met                              | M                        |
| Phenylalanine               | Phe                              | F                        |
| Proline                     | Pro                              | P                        |
| Serine                      | Ser                              | S                        |
| Threonine                   | Thr                              | T                        |
| Tryptophan                  | Trp                              | W                        |
| Tyrosine                    | Tyr                              | Y                        |
| Valine                      | Val                              | V                        |