USP1 (G670A, G671A)/UAF1 Complex Recombinant

Product Information

| Description: | Recombinant human complex made of USP1 (ubiquitin specific peptidase 1), encompassing amino acids 2-785(end), and UAF1 (ubiquitin specific peptidase 1), encompassing amino acids 1-677 (end). The USP1 construct contains an N-terminal FLAG-Tag and the UAF1 construct contains a C-terminal His-tag (6xHis). The proteins were co-expressed and purified as a complex. Two mutations of interest are present in USP1, G670A, G671A. |
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| Background: | Ubiquitin specific peptidase 1 (USP1) belongs to a large group of ubiquitin-specific proteases capable of cleaving ubiquitin from other proteins. These enzymes are also referred to as deubiquitinating peptidases, deubiquitinases (DUBs), ubiquitin proteases, ubiquitin hydrolases or ubiquitin isopeptidases. USP1 requires the presence of UAF1 (ubiquitin specific peptidase 1) to be active, making UAF1 its regulator. DUBs contribute to the ubiquitin signaling pathway by countering the signal induced by ubiquitin conjugating enzymes and ligases. DUBs are a new therapeutic target for neurodegenerative diseases, cancer, diabetes, and autoimmune pathologies. |
| Species: | Human |
| Construct: | USP1 (FLAG-2-785(end)) / UAF1 (1-677(end)-His) |
| Mutations: | USP1: G670A, G671A |
| Concentration: | 1.04 mg/ml |
| Expression System: | HEK293 |
| Purity: | 88% |
| Format: | Aqueous buffer solution. |
| Formulated In: | 40 mM Tris-HCl, pH 8.0, 110 mM NaCl, 2.2 mM KCl, 80 μg/ml FLAG peptide, and 20% glycerol |
| MW: | USP1: 89 kDa; UAF1: 77 kDa |
| Genbank Accession: | USP1: NM_003368.4; UAF1: NM_020839.4 |
| Stability: | At least 6 months at -80°C. |
| Storage: | -80°C |
| Instructions for Use: | Thaw on ice and gently mix prior to use. DO NOT VORTEX. Perform a quick spin before opening. Aliquot into small volumes and flash freeze for long term storage. Avoid multiple freeze/thaw cycles. |
| Assay Conditions: Applications: | Assay done according to USP1 Inhibitor Screening Assay Kit (BPS Bioscience #78831). Useful for the study of enzyme kinetics, screening inhibitors, and selectivity profiling. |

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Quality Control Data

