

**HUMAN PRNP PROTEIN, HFC TAG****Cat.#:** 11517**Product Name:** Human PRNP Protein**Size:** 10 µg, 50 µg and 100 µg**Synonyms:** PrP;ASCR;PrP27-30;PrP33-35C;CD230**Target:** PRNP**UNIPROT ID:** P04156**Description:** Recombinant human PRNP protein with C-terminal human Fc tag

**Background:** The protein encoded by this gene is a membrane glycosylphosphatidylinositol-anchored glycoprotein that tends to aggregate into rod-like structures. The encoded protein contains a highly unstable region of five tandem octapeptide repeats. This gene is found on chromosome 20, approximately 20 kbp upstream of a gene which encodes a biochemically and structurally similar protein to the one encoded by this gene. Mutations in the repeat region as well as elsewhere in this gene have been associated with Creutzfeldt-Jakob disease, fatal familial insomnia, Gerstmann-Straussler disease, Huntington disease-like 1, and kuru. An overlapping open reading frame has been found for this gene that encodes a smaller, structurally unrelated protein, AltPrp. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Nov 2014]

**Species/Host:** HEK293

**Molecular Weight:** The protein has a predicted molecular mass of 48.8 kDa after removal of the signal peptide. The apparent molecular mass of PRNP-hFc is approximately 55-70 kDa due to glycosylation.

**Molecular Characterization:** PRNP(Lys23-Gly229) hFc(Glu99-Ala330)

**Purity:** The purity of the protein is greater than 95% as determined by SDS-PAGE and Coomassie blue staining.

**Formulation & Reconstitution:** Lyophilized from nanodisc solubilization buffer (20 mM Tris-HCl, 150 mM NaCl, pH 8.0). Normally 5% – 8% trehalose is added as protectants before lyophilization.

**Storage & Shipping:** Store at -20°C to -80°C for 12 months in lyophilized form. After reconstitution, if not intended for use within a month, aliquot and store at -80°C (Avoid repeated freezing and thawing). Lyophilized proteins are shipped at ambient temperature.



Figure 1. Human PRNP Protein, hFc Tag on SDS-PAGE under reducing condition.