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## **Diverse functions of the prion protein – does proteolytic processing hold the key?**

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### **Abstract:**

Proteolytic processing of the cellular and disease-associated form of the prion protein leads to generation of bioactive soluble prion protein fragments and modifies the structure and function of its cell-bound form. The nature of proteases responsible for shedding,  $\alpha$ -,  $\beta$ -, and  $\gamma$ -cleavage of the prion protein are only partially identified and their regulation is largely unknown. Here, we provide an overview of the increasingly multifaceted picture of prion protein proteolysis and shed light on physiological and pathological roles associated with these cleavages.

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