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Author: Jun Yeul Lim Nam Ah Kim Dae Gon Lim Ki Hyun Kim Shavron Hada Seong Hoon Jeong



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Evaluation of etanercept degradation under oxidative stress and potential protective effects of various amino acids

Jun Yeul Lim, Nam Ah Kim, Dae Gon Lim, Ki Hyun Kim, Shavron Hada, Seong Hoon

Jeong*

College of Pharmacy, Dongguk University-Seoul, Gyeonggi 410-820, Korea

* To whom correspondence should be addressed.

Seong Hoon Jeong, PhD

College of Pharmacy

Dongguk University-Seoul

Goyang, Gyeonggi 410-820, Republic of Korea

Tel: 82) 10-5679-0621

E-mail: shjeong@dongguk.edu

* To whom this correspondence should be addressed

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Graphical abstract

Abstract

To evaluate the oxidative stability of proteins, a model protein, etanercept, was exposed to oxidative stress conditions using hydrogen peroxide. Various amino acids were also evaluated on their antioxidant effect. Transition temperature (T_m) , secondary structural content, hydrodynamic size, and aggregation and fragmentation of etanercept in solution were assessed using dynamic light scattering (DLS), size exclusion chromatography (SEC),

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