

SINGLE-CHAIN POLYPEPTIDE ACTIVATED IN USE**ABSTRACT**

Provided are a single-chain polypeptide which is highly activated after entering a
5 specific use site, attenuated and can be safer and more convenient to produce, and the
corresponding use thereof, a nucleic acid encoding same and a preparation method therefor.
The single-chain polypeptide comprises: a first domain, an intermediate amino acid
sequence region, and a second domain, wherein the intermediate amino acid sequence region
is located between the first domain and the second domain, and contains at least one first
10 enzyme cleavage site, the first enzyme cleavage site is designed to be capable of being highly
specifically cleaved by a first protease present in a specific part of the human body, and the
single-chain polypeptide is converted into an activated form capable of inhibiting the release
of an information substance after being cleaved by the first protease at the first enzyme
cleavage site.

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Figure 1