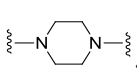
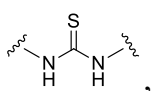
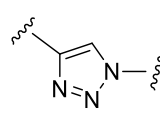
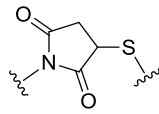


Abstract

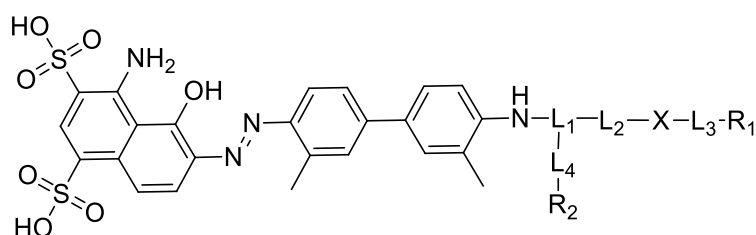
**TRUNCATED EVANS BLUE MODIFIED FIBROBLAST ACTIVATION
PROTEIN INHIBITOR, PREPARATION METHOD AND APPLICATION THEREOF**

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The present disclosure provides a truncated Evans Blue modified fibroblast activation protein inhibitor compound. The compound is formed by connecting truncated Evans Blue, a fibroblast activation protein inhibitor and a nuclide chelating group by means of connecting groups L₁, L₂, L₃, L₄ and X. The compound has the following structure shown in Formula (I), where R₁ is a
10 fibroblast activation protein inhibitor; L₁ is lysine, glutamic acid, or a derivative structure thereof; L₂ is -(CH₂)_n-, n is an integer from 0 to 30, and each -CH₂- may be individually substituted or unsubstituted with -O-, -NH-, -(CO)-, -NH(CO)-, or -(CO)-NH-; L₃ is -(CH₂)_m-, m is an integer from 0 to 30, and each -CH₂- may be individually substituted or unsubstituted with -O- or -(CO)-; L₄ is -(CH₂)_p-, p is an integer from 0 to 30, and each -CH₂- may be
15 individually substituted or unsubstituted with -O-, -NH-, -(CO)-, -NH(CO)-, or -(CO)-NH-; X

is selected from N, C, O, S, or , , , and ; and

R₂ is a nuclide chelating group. The present disclosure also provides a radiolabeled complex based on the structure of the compound. The compound and the radiolabeled complex have the characteristics of significantly prolonging the half-life in blood circulation, improving the
20 uptake and enrichment in tumors and prolonging the retention time, and are suitable for nuclide therapy and imaging of tumors with high expression of FAP.



Formula (I)

(FIG. 23)

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