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(54) **ALPHA-(3,5-DIMETHOXYBENZYLIDENE)-  
ALPHA'-HYDROCARBYL METHYLENE  
CYCLIC KETONE AND PREPARATION  
METHOD THEREOF**

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CPC ..... **C07C 49/753** (2013.01); **C07C 45/45**  
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(58) **Field of Classification Search**

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See application file for complete search history.

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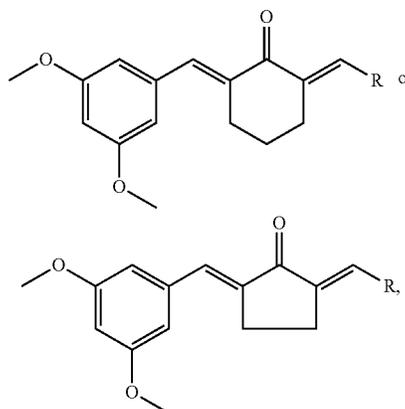
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(57) **ABSTRACT**

The present invention discloses a  $\alpha$ -(3,5-dimethoxybenzylidene)- $\alpha'$ -hydrocarbyl methylene cyclic ketone with the following formula:



wherein R is aryl or alkyl, its preparation method is: the cyclic ketone blended with morpholine are subjected to azeotropic dehydration to give enamine, the enamine is condensed with 3,5-dimethoxybenzaldehyde and then condensed with alkyl or aryl formaldehyde under acidic or basic conditions to give the product, the present invention further discloses an antitumor agent comprising  $\alpha$ -(3,5-dimethoxybenzylidene)- $\alpha'$ -hydrocarbyl methylene cyclic ketone or medically acceptable salts and pharmaceutically acceptable carriers thereof. Through the above, the present invention provides  $\alpha$ -(3,5-dimethoxybenzylidene)- $\alpha'$ -hydrocarbyl methylene cyclic ketone and preparation method thereof, the said compound is a high activity antitumor agent obtained by piecing and modifying the formulas of natural anti-tumor active ingredient resveratrol and curcumin, which has a good inhibitory effect on epidermal growth factor receptor.

**8 Claims, No Drawings**