

# Raspberry ketone

## Catalog No: tcsc0016855



### Available Sizes

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**Size:** 100mg

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### Specifications

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**CAS No:**

5471-51-2

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**Formula:**

$C_{10}H_{12}O_2$

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**Pathway:**

Cell Cycle/DNA Damage

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**Target:**

PPAR

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**Purity / Grade:**

>98%

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**Solubility:**

10 mM in DMSO

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**Alternative Names:**

Frambione;4-(4-Hydroxyphenyl)-2-butanone

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**Observed Molecular Weight:**

164.2

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### Product Description

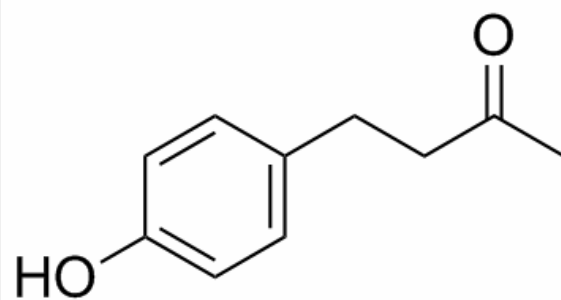
Raspberry ketone is a major aromatic compound of red raspberry, widely used as a fragrance in cosmetics and as a flavoring agent in foodstuff; also shows **PPAR- $\alpha$**  agonistic activity.

IC50 & Target: PPAR- $\alpha$ <sup>[3]</sup>

**In Vitro:**

Raspberry ketone (1, 10, 20, and 50  $\mu$ M) suppresses adipogenesis and lipid accumulation in 3T3-L1 pre-adipocytes. Raspberry ketone (10  $\mu$ M) significantly blocks C/EBP $\alpha$ , PPAR $\gamma$ , and aP2 expression and increases the expression of ATGL and HSL, and CPT1B<sup>[1]</sup>.

**In Vivo:** Raspberry ketone (0.5%, 1%, or 2%) increases the levels of total cholesterol (TC), triglycerides (TG), low-density lipoprotein cholesterol contents (LDL-C), ISI (insulin-sensitivity index), PPAR- $\alpha$  and LDLR, decreases the serum levels of AST (aspartate aminotransferase), ALT (alanine aminotransferase), ALP (alkaline phosphatase), IRI (insulin resistance index), GLU (glucose), INS (insulin-sensitivity index), LEP (leptin), and TNF- $\alpha$  in rats compared with a high-fat diet-induced NASH model. Raspberry ketone also causes increased SOD activities<sup>[2]</sup>. Raspberry ketone shows cardioprotective action against isoproterenol-induced myocardial infarction in rats, and the effects may be due to its PPAR- $\alpha$  agonistic activity<sup>[3]</sup>.



All products are for RESEARCH USE ONLY. Not for diagnostic & therapeutic purposes!