



## Raspberry ketone

Catalog No: tcsc0016855

## **Available Sizes**

Size: 100mg



## **Specifications**

CAS No:

5471-51-2

Formula:

 $C_{10}^{H}_{12}^{O}_{2}$ 

**Pathway:** 

Cell Cycle/DNA Damage

**Target:** 

**PPAR** 

**Purity / Grade:** 

>98%

**Solubility:** 

10 mM in DMSO

**Alternative Names:** 

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

**Observed Molecular Weight:** 

164.2

## **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%) increasses the levels of total cholesterol (TC), triglycerides (TG), low-density lipoprotein cholesterol contents (LDL-C), ISI (insulin-sensitivr 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-sensitivr 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!