

# Retinoic acid, all trans

## Retinoic acid receptor ligand

Retinoic acid is the active metabolite of vitamin A. It is a potent modulator of growth and differentiation exerting its effects by binding to nuclear retinoic acid receptors (RARs) which directly regulate gene expression. All trans retinoic acid binds to RAR  $\alpha$ ,  $\beta$  and  $\gamma$  subtypes with  $K_d$  values of 0.2, 0.4 and 0.2 nM respectively. RARs function as ligand-dependent transcription factors. Retinoic Acid also promotes the differentiation of mouse embryonic stem cells into adipocytes, neurons and glia in vitro. It guides development of the posterior part of the embryo.

Citations: 13

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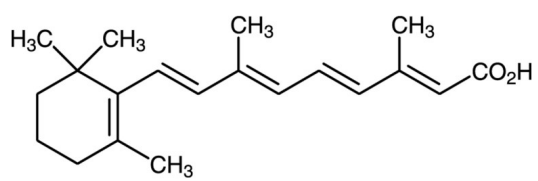
## Ordering Information

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BML-GR100-0500	500mg
BML-GR100-5000	5g

## Manuals, SDS & CofA

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## Handling & Storage

**Use/Stability** As indicated on product label or CoA when stored as recommended.

**Long Term Storage** -20°C

**Shipping** Ambient Temperature

**Regulatory Status** RUO - Research Use Only

## Product Details

**Appearance** Yellow solid.

**CAS** 302-79-4

**Couple Target** Retinoic acid receptor

**Couple Type** Ligand

**Formula**  $C_{20}H_{28}O_2$

**MW** 300.4

**Purity** ≥95%

**Solubility** Soluble in DMSO (25 mg/ml) or ethanol (10 mg/ml).

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