

Product Information

α_{2A} ADRENERGIC RECEPTOR, HUMAN RECOMBINANT (Sf9)

Product Number **A-213**

Product Description

α_{2A} Adrenergic Receptor, human recombinant (Sf9) is a frozen aliquot of membranes from Sf9 cells transfected with the human recombinant α_{2A} adrenergic receptor.

Reagent

α_{2A} Adrenergic, human recombinant (Sf9) is suspended in 50 mM Tris-HCl, pH 7.4, 10% glycerol, and 1% bovine serum albumin (BSA).

Procedure

Incubation buffer:
75 mM Tris-HCl, pH 7.4
12.5 mM MgCl₂
2 mM EDTA

Binding Protocol

Membranes:

Dilute in incubation buffer (0.5 mL of membrane + 24.5 mL incubation buffer).

Assay mixture:

500 μ l diluted membranes
20 μ l radioligand
20 μ l buffer or unlabeled ligand

Radioligand:

[³H]-MK-912 at a final concentration of 0.7 nM for competition studies.

Unlabeled ligand:

WB-4101 at a concentration of 10 μ M.

Incubation time:

60 minutes at 27 °C

Separation:

Over GF/C filter (5 mm diam., presoaked in 0.3% polyethylamine prepared in incubation buffer) then washed 9x with 500 μ l of ice cold 50 mM Tris-HCl, pH 7.4.

Results

Typical affinities using standard binding assay above. Results may vary from lot to lot.

Ligand	K _i (nM)
[³ H]-MK 912	0.30 (Kd)
Yohimbine	5.0
Oxymetazoline	13

Storage/Stability

Store tightly sealed at -80 °C. The membranes will retain their original specific activity for several months when stored at -80 °C in the original packing solution. Repeated freeze-thaw of this product is not recommended.

Precautions

While no human toxicity data is available for this substance, it should be handled with care. Precautions should be taken to avoid contact by all routes of exposure.

References

1. Renouard, A. et al., *J. Pharmacol. Exp. Ther.*, **270**, 946-957 (1994).
2. Lomasney, J.W. et al., *Proc. Natl. Acad. Sci. USA*, **87**, 5094-5098 (1990).
3. Lawhead, R.G., et al., *Anesthesiology*, **77**, 983-991 (1992).

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