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

ProductInformation

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 α2A 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 $MgCl_2$
2 mM EDTA

Binding Protocol
Membranes:
Dilute in incubation buffer (0.5 mL of membrane + 24.5 mL incubation buffer).

Assay mixture:
500 µl diluted membranes
20 µl radioligand
20 µl buffer or unlabeled ligand

Radioligand:
[^{3}H]-MK-912 at a final concentration of 0.7 nM for competition studies.

Unlabeled ligand:
WB-4101 at a concentration of 10 µM.

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 µl 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).

mje 04/01