



5-HT₇ SEROTONIN RECEPTOR, HUMAN (CHO)

Product No. **S177**

Product Description

A frozen aliquot of membranes from CHO cells transfected with the human recombinant 5-HT₇ serotonin receptor.

Reagents

Membranes are suspended in 0.5 ml 50 mM Tris-HCl at pH 7.4, containing 10% glycerol and 1% BSA.

Storage

Store tightly sealed at -80 °C. When stored in the original packaging solution, the membranes retain their original specific activity for several months.

Product Profile

Specific activity is determined by non-linear regression saturation binding analysis. Specific activity and Concentration will be reported on Certificate of Analysis for each lot. Product is provided as 50 units/vial. Format: 100 units/ml with one unit yielding not less than 1,000 specific dpm using the recommended assay conditions.

RECOMMENDED ASSAY CONDITIONS

Incubation buffer

50 mM Tris-HCl at pH 7.4, containing 10 mM MgSO₄ and 0.5 mM EDTA.

Binding Protocol

1. Membranes:

Dilute in incubation buffer (0.5 ml of membranes to 24.5 ml of incubation buffer).

2. Assay mixture:

500 µl of diluted membranes
20 µl of [³H]-radioligand in buffer
20 µl of incubation buffer or unlabeled ligand in buffer

Product Information

Radioligand: [³H]-LSD at a final concentration of 5.5 nM for competition studies.

Unlabeled ligand: Clozapine (Cat. No. C-171) at a final concentration of 25 µM.

3. Incubation time: 120 minutes at 27 °C.

4. Separation:

Over GF/C filter (5 mm diameter, presoaked in 0.3% polyethyleneimine, Cat. No. P-182) then wash 4x with 500 µl of ice cold 50 mM Tris-HCl at pH 7.4.

Affinity Constants

Using a preparation of the 5-HT₇ serotonin receptor, human recombinant, the following affinity constants are typical results. See Certificate of Analysis for lot specific information.

LIGAND (Cat. No.)	AFFINITY (nM)
[³ H]-LSD	5.5 (Kd)
Methiothepin (M-149)	2.0
Metergoline (M-167)	5.3
Clozapine (C-171)	38
Mianserin (S-100)	51

References

1. Shen, Y., Monsma, F.J. Jr., Metcalf, M.A., Jose, P.A., Hamblin, M.W., Sibley, D.R. *J. Biol. Chem.* **268**, 18200-18204 (1993).
2. Ruat, M., Traiffort, E., Leurs, R., Tardivel-Lacombe, J., Diaz, J., Arrang, J.M., Schwartz, J.C. *Proc. Natl. Acad. Sci. USA* **90**, 8547-8551 (1993).
3. Bard, J.A., Agombick, J., Adham, N., Vaysse, P., Branchek, T.A., Weinschenk, R.L. *J. Biol. Chem.* **268**, 23422-23426 (1993).

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