Select-A-Bead for Receptor Binding Assays

Product Number: RPNQ0250

Warning

For research use only. Not recommended or intended for diagnosis of disease in humans or animals.
Do not use internally or externally in humans or animals.

Contents

1x100mg PVT-PEI-WGA Type A
1x100mg PVT-PEI-WGA Type B
1x100mg PVT-WGA
1x100mg YSi-WGA
1x100mg YSi-Poly-l-lysine

Storage and Expiration

All bead types are supplied as a lyophilized solid containing 10% sucrose by weight. This material should be stored protected from light at 2-8°C. Once Reconstituted, the beads are stable for up to 7 days when stored in the appropriate conditions.

Safety Warnings and Precautions

All chemicals should be considered as potentially hazardous. We therefore recommend that this product is handled only by those persons who have been trained in laboratory techniques and that it is used in accordance with the principles of good laboratory practice. Wear suitable protective clothing such as laboratory overalls, safety glasses and gloves. Care should be taken to avoid contact with skin or eyes. In the case of contact with skin or eyes wash immediately with water. See material safety data sheet(s) and/or safety statement(s) for specific advice.

CAUTION: For use with radioactive material.
This product is to be used with radioactive material. Please follow the manufacturer's instructions relating to the handling, use, storage, and disposal of such material.

Quality Control

Each batch of PVT-PEI-WGA Type A, PVT-PEI-WGA Type B, PVT-WGA and YSi-WGA SPA beads is tested for its relative binding capacity of [3H]N,NÊ,N‰-triacetylchitotriose. Each batch of YSi-Poly-l-lysine SPA beads is tested for functional performance in a receptor ligand binding assay.

BEAD RECONSTITUTION

Before use, the SPA beads should be reconstituted in a buffer appropriate for the particular assay to be performed. The SPA beads should be mixed to ensure a homogeneous suspension while pipetting. This may be done by continuous agitation with a magnetic stirrer. Reconstituted beads can usually be stored at 2-8°C for up to seven days. DO NOT FREEZE.

PLEASE NOTE: All bead types have been freeze-dried from a 1% sucrose solution. Anti-microbial agents are not included in this reagent. The user should therefore be aware that microbial contamination may occur when the reconstituted beads are stored for prolonged periods. If antimicrobial agents (eg sodium azide) are added on storage, then it remains the responsibility of the user to evaluate the effects of the added agent on the assay.
Please note: Avoid exposure of the yttrium silicate bead types and finished assays containing yttrium silicate beads to halogen light. Exposure of yttrium silicate beads to halogen light can cause elevated counts due to phosphorescence. If elevated counts due to light exposure are observed, place the assay in the dark for a minimum of four hours before recounting.

ASSAY CONDITIONS

All bead types, when coupled to membrane bound receptors, are designed to be used in ligand binding assays. The binding of radiolabelled ligands to such immobilized receptors brings the isotope into close proximity with the scintillant which is incorporated within the bead. This allows the emitted radiation (beta-particles for [3H] or Auger electrons for [125I]) to stimulate the scintillant to emit light. Any unbound radiolabelled ligand is not in close enough proximity to the scintillant to allow such energy transfer and hence no signal is generated. Light emitted by stimulated SPA beads can be detected by either conventional scintillation counters or multidetector instruments. It remains the responsibility of the user to optimize the amount of SPA bead required and the incubation time required for each assay. To achieve optimal counts, excess bead should be present in order to capture all of the receptor present in the assay tube. The amount of receptor preparation together with the radiolabelled ligand being used needs to be optimized for each assay.
Samples which are colored may require color quench correction.

RPNQ0250-R Rev01

Revvity, Inc.
940 Winter Street
Waltham, MA 02451 USA
(800) 762-4000
www.revvity.com