Certificate of Analysis

MembraneMax™ HN Expression Module, 20 rxns

Product No. 451136
Lot No. 1863863
Date of Manufacture 28Feb2017

MembraneMax™ HN Reagent

Each lot of MembraneMax™ HN Reagent is qualified in an *in vitro* transcription/translation reaction with pEXP5−CT/bR control plasmid and the other reagents supplied in the MembraneMax™ HN Protein Expression Kit (Cat. no. A10634) and following the instructions provided in the manual. Functional bacteriorhodopsin protein must be produced as determined in a colorimetric assay through binding of all−trans retinal and appearance of pink color in the reaction mixture.

Results: Meets specifications

pEXP5−CT/bR Control Plasmid

Restriction Analysis: The supercoiled plasmid is qualified by restriction enzyme digestion to confirm its identity. Restriction digests must demonstrate the correct banding pattern when electrophoresed on an agarose gel. The table below lists the restriction enzymes and expected fragments.

Restriction Enzyme	Expected Fragments (bp)
ApaL I	1692, 1246, 497
Pst I	3435
Xba I	2761, 674
Xmn I	2265, 1170

Purity: To ensure purity, the absorbance at 260 nm (A_{260}) and the absorbance at 280 nm (A_{280}) of the vector preparations are measured by spectrophotometry. The A_{260}/A_{280} ratio must be between 1.8 − 2.0.

Results: Meets all specifications.

For Research Use Only. Not for use in diagnostic procedures. If you have any further questions about this Certificate of Analysis, please contact Technical Services at 1−800−955−6288 (US and Canada) or 1−760−603−7200, x2 (all other countries).

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