

# Transcend™ Non-Radioactive Translation Detection System

Instructions for Use of Products L5061 and L5070.

Quick Protocol

## Non-Radioactive Translation and Detection Protocol

### Translation Protocol

1. Thaw the Transcend™ tRNA on ice. Thaw the translation lysate by handwarming and immediately place on ice. Thaw all other components at 37°C and then store on ice.
2. Set up reactions on ice, adding all the components except the Transcend™ tRNA. Gently mix the samples and briefly centrifuge if necessary. Add the Transcend™ tRNA.

Rabbit Reticulocyte Lysate	35µl
Nuclease-Free Water	10µl
RNasin® Ribonuclease Inhibitor (40u/µl)	1µl
1mM complete amino acid mixture (or mixture of two minus amino acid mixtures)	1µl
RNA template in Nuclease-Free Water	2µl
Transcend™ tRNA	1–2µl
final volume	50µl

3. Immediately incubate the translation reaction at 30°C for 60 minutes.
4. Place the tube on ice to terminate the reaction.

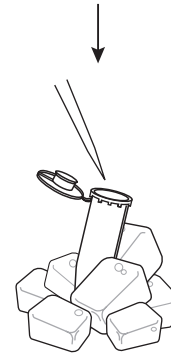
### Denaturing Gel Analysis of Translation Products

1. Remove 1µl of the 50µl translation reaction and add it to 15µl of SDS sample buffer.
2. Heat to 90°C for 2 minutes.
3. Load the denatured samples onto an SDS-polyacrylamide gel and perform electrophoresis.

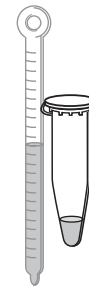
See the reverse side for colorimetric detection of translation products.



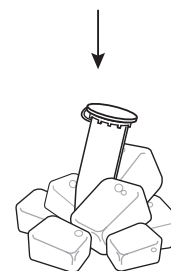
Set up reaction on ice.



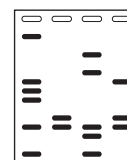
Add 1–2µl of Transcend™ tRNA.



Immediately incubate at 30°C for 60 minutes.



Place tube on ice to terminate reaction.



Aliquot 1µl of the translation reaction to 15µl of SDS sample buffer. Heat to 90°C for 2 minutes. Analyze sample by SDS-PAGE.

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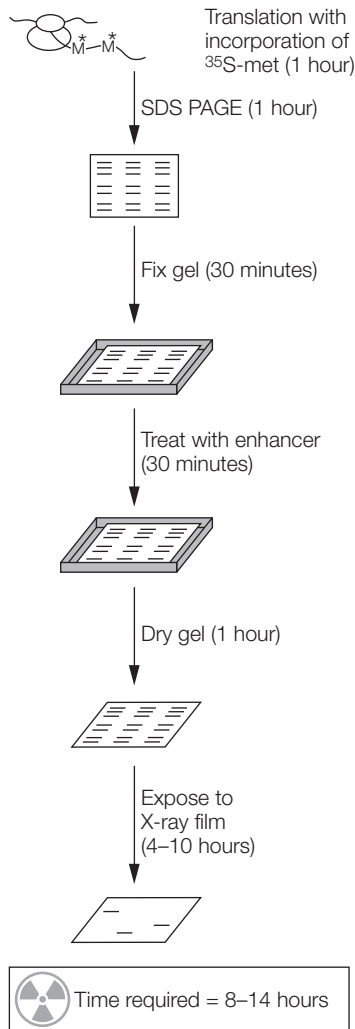
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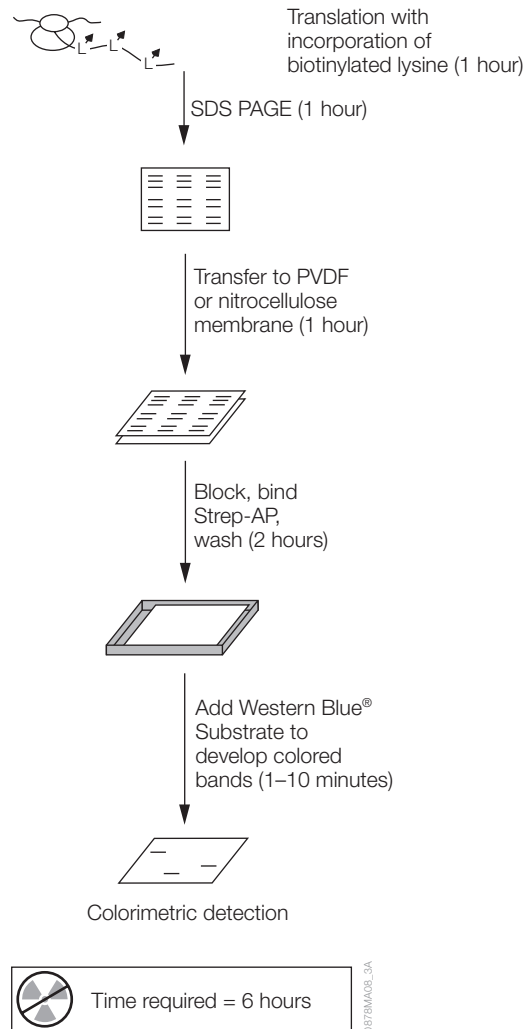
Quick Protocol

## Colorimetric Detection of Translation Products

### Standard radioisotopic incorporation and detection



### Transcend™ Biotinylated Lysine tRNA incorporation and detection



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Additional protocol information in Technical Bulletin #TB182, available online at: [www.promega.com](http://www.promega.com)