

# SpyCatcher Plate

## Summary

Code	APP009
Pre-coated protein	Recombinant SpyCatcher
Specificity	SpyTag-fusion protein
Sensitivity	1 ng/well
Capacity	100~300 ng/well
Reagents Compatibility	Compatible with common used reagents
Storage:	SpyCatcher Plate should be shipped on ice pack. The unopened plate is stable for at least 2 years when stored at 2-8 °C. The product is more stable when stored at -20 °C. The opened plate should be used within one week.

## Description

SpyCatcher Plate is a 96-well microtiter plate coated with SpyCatcher protein. The product is developed for rapid capture of SpyTag-fusion protein in different samples, including SpyTag-fusion proteins from Ecoli, yeast and mammalian extracts and cell culture supernatant. The plate can be applied to many assays, from direct SpyTag-fusion protein detection and screening, to more comprehensive protein-protein interaction assays. SpyCatcher Plate can bind target proteins with high specificity and capacity. Its capacity and sensitivity varies, depending on protein size, structure and solution environment.

## Background:

The SpyCatcher-SpyTag system was developed seven years ago as a method for protein ligation. It is based on a modified domain from a *Streptococcus pyogenes* surface protein (SpyCatcher), which recognizes a cognate 13-amino-acid peptide (SpyTag). Upon recognition, the two form a covalent isopeptide bond between the side chains of a lysine in SpyCatcher and an aspartate in SpyTag. This technology has been used, among other applications, to create covalently stabilized multi-protein complexes, for modular vaccine production, and to label proteins. The SpyTag system is versatile as the tag is a short, unfolded peptide that can be genetically fused to exposed positions in target proteins; similarly, SpyCatcher can be fused to reporter proteins such as GFP, and to epitope or purification tags.

## Application notes

Protein Quantification  
Protein Expression Screening  
Immuno-capture of SpyTag-fusion protein complex

All the reagents should be equilibrated to room temperature (20-25 °C) before test.

This manual gives general protocols for different assays. The user should optimize the protocol to achieve ideal test result.