



**sol-R™ coded beads:**  
making light work of ELISA

# introducing sol-R™ coded beads

TTP Labtech's sol-R coded beads represent a range of reagents for the quantification of secreted protein in multiplexed screening assays. Designed for use with TTP Labtech's mirrorball fluorescence cytometer, sol-R beads are set to revolutionise the immunoassay workflow.



**up to 5 multiplexable bead codes**



**no-wash, mix-and-read protocol**



**screening-friendly price point**

There are many reasons why gold standard immunoassays are not widely utilised within a screening environment including: multi-step protocols that are complex to automate, restricted throughput, limited multiplexing and high screening costs.

Remove these limitations with TTP Labtech's sol-R coded beads and watch your costs go down and your productivity go up.



## simple

- no-wash, mix and read protocols
- automation friendly solution



## productive

- 384-well plate read time in 12 minutes
- up to 5 codes for multiplexing



## economical

- switch to sol-R beads and decrease screening costs
- multiplex to save precious samples



## reliable

- consistent binding capacity across codes
- no-wash protocols, no loss of weak interactions

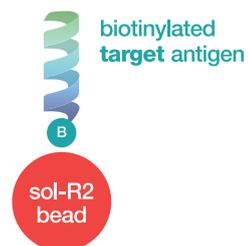
# sol-R streptavidin (SA) coded beads

A typical sol-R SA bead workflow begins with the separate immobilisation of individual biotinylated antibodies or target proteins onto individual bead codes. Coated beads are stable and therefore may be prepared in sufficient quantities to supply your entire screening campaign. Individual codes are subsequently combined, then dispensed into an assay plate with detection reagent and sample, or stored for future use in subsequent screening runs.

## example assay: antibody screening

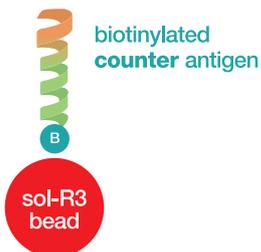
### hit identification

bead#1 target antigen



### screen out false positives in the same assay

bead#2 selectivity counter screen



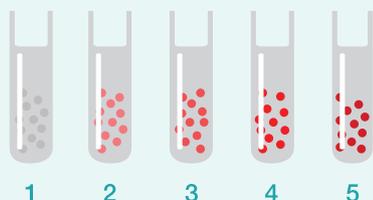
bead#3 non-specific binding



For antibody screening, multiplexing of target specificity and selectivity binding protocols enhances productivity through the combination of 3 assays into one well, saving time, consumable costs and conserving precious sample (just 10  $\mu$ L required for 384-well assays).

## bead preparation

sol-R1 sol-R2 sol-R3 sol-R4 sol-R5



biotinylated antigen

1 hour incubation

3 washes

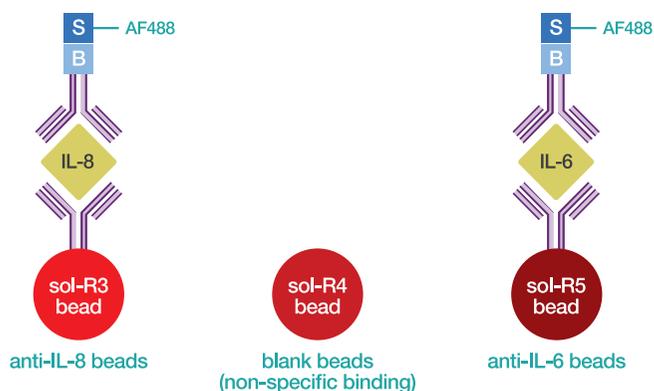
combine beads



# sol-R carboxy (COOH) coded beads

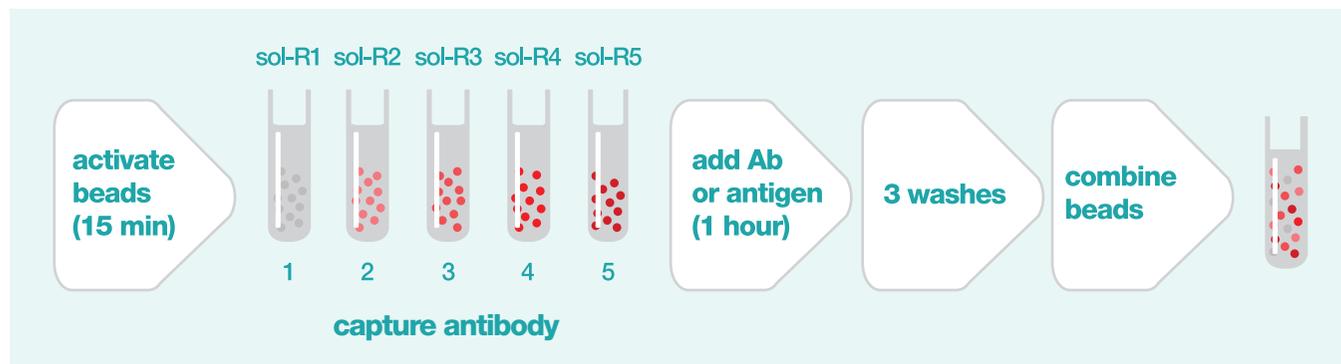
A typical sol-R COOH bead workflow begins with the separate covalent coupling of individual antibodies or target proteins onto individual bead codes using simple carbodiimide coupling chemistry. Coated beads are stable and therefore may be prepared in sufficient quantities to supply your entire screening campaign. Individual codes are subsequently combined, then dispensed into an assay plate with detection reagent and sample, or stored for future use in subsequent screening runs.

## example assay: cytokine quantification



Combination of anti-IL6, anti-IL8 and blank beads in a no-wash assay format offers a significant process improvement, versus traditional ELISA for consumable cost savings and protocol step reductions that result in free time and budget for additional tasks.

## bead preparation



# sol-R™ no-wash screening protocol

mirrorball's no-wash sol-R bead screening protocols couldn't be simpler. Remove an aliquot of pre-prepared beads and combine with detection reagent. Dispense into microplates and add sample. Incubate then read using TTP Labtech's mirrorball for results in just 12 minutes per plate.



## sol-R no-wash screening protocol



## available sol-R kits

Any combination of codes 1-5 may be brought together into sol-R bead kits. Kits are optimised for 384-well plates but protocols for 96-well and 1536-well plates are also available. TTP Labtech's sol-R beads may be purchased in volumes for dispensing into 1, 5, 20, 50 & 100 assay plates.

**contact [sales@ttplabtech.com](mailto:sales@ttplabtech.com)  
for pricing enquiries, or for more information**

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