

Catalog Number: otma

3 Publications

## Basic Information

**Catalog Number:**  
otma**Applications:**  
IP, CoIP, ChIP, RIP**Conjugate:**  
Magnetic agarose beads; bead size: ~40 µm (cross-linked 6 % magnetic agarose beads)**Host:**  
Alpaca**Type:**  
Nanobody**Class:**  
Recombinant

## Description

The ChromoTek Halo-Trap Magnetic Agarose consists of an anti-Halo-tag Nanobody (VHH), which is covalently bound to magnetic agarose beads. Halo-Trap Magnetic Agarose is used to immunoprecipitate Halo-tag proteins from cell extracts of various organisms like mammals, plants, bacteria, yeast, insects etc. in the presence or absence of a covalently bound ligand. The interaction between Halo-Trap and the Halo-tag protein is reversible.

## Binding capacity

12.5 µg of recombinant Halo-tag per 25 µL bead slurry

## Specificity/Target

Halo-tag (modified variant of the bacterial haloalkane dehalogenase enzyme from *Rhodococcus rhodochrous*) in the absence or presence of covalently bound chloroalkane-based ligands.

## Elution buffer

SDS sample buffer  
0.2 M glycine pH 2.5

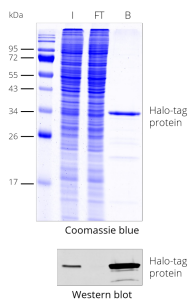
## Affinity ( $K_D$ )

Dissociation constant  $K_D$  of 2 nM

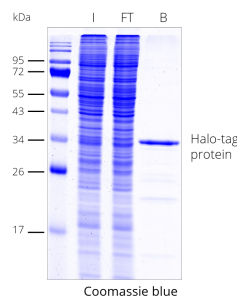
## Storage

**Storage:**  
Upon receipt store at +4°C. Do not freeze!**Storage Buffer:**  
20% ethanol

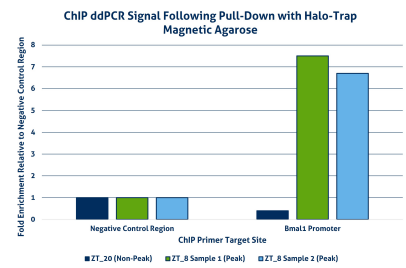
## Selected Validation Data



Halo-Trap Magnetic Agarose for immunoprecipitation of Halo-tag proteins. HEK293T cell lysate with Halo-tag protein. Coomassie and Western blot. Halo-tag antibody [28A8], monoclonal mouse IgG1 and anti-mouse secondary antibody. I: Input, FT: Flow-Through, B: Bound



Halo-trap Magnetic Agarose for immunoprecipitation of Halo-tag proteins. HEK293T cell lysate with Halo-tag protein. I: Input, FT: Flow-Through, B: Bound



Data Courtesy of Dr. Louise Hunter, University of Manchester

Chromatin Immunoprecipitation (ChIP) utilizing Halo-Trap Magnetic Agarose (otma) was performed on cross-linked chromatin isolated from the liver of a transgenic mouse line expressing a Halo-tagged version of clock factor REVERB $\alpha$  (HaloReverb $\alpha$ ). Samples were isolated at timepoints of non-peak (ZT20) or peak (ZT8) binding of the REVERB $\alpha$  protein to the Bmal1 promoter region of the genome. The enriched DNA was then quantified by ddPCR utilizing primers directed at a gene desert (negative control region) or the Bmal1 promoter. Fold enrichment of each sample DNA is relative to that of the negative control region of each sample.