## Recombinant Bovine Bos d 4 [His] (DAG- <br> WT214)

This product is for research use only and is not intended for diagnostic use.

## PRODUCT INFORMATION

| Antigen Description | Recombinant Bovine Bos d 4 is produced by Mammalian expression system and the target <br> gene encoding Glu20-Leu142 is expressed with a 6 His tag at the C-terminus. |
| :--- | :--- |
| Purity | $>95 \%$ as determined by SDS-PAGE. |
| Conjugate | His |
| Applications | Immunogen/Calibrator or standard |
| Molecular Weight | 15 kDa |
| Size | 1 mg |
| Buffer | PBS, pH 7.4 |
| Storage | Reconstituted protein solution should be stored at $\leq-20^{\circ} \mathrm{C}$. |

## BACKGROUND

## Introduction

Milk is one of the first food components introduced into the diet and therefore represents one of the most important food allergen sources in terms of frequency and severity of allergic manifestations. The symptoms of cow's milk allergy are due to IgE-mediated activation of mast cells and basophils as well as to activation of allergen-specific T cells, and they comprise a plethora of gastrointestinal, skin, respiratory, and severe systemic manifestations such as death due to anaphylactic shock. Cow's milk contains 25 different proteins, but only the whey proteins $\alpha$-lactalbumin, $\beta$-lactoglobulin, BSA, and lactoferrin, as well as the four caseins, have been identified as allergens. a-Lactalbumin (LA) is the regulatory subunit of lactose synthase ,modulating the affinity of the catalytic component, for acceptor substrates through a reversible protein-protein interaction. it changes the substrate specificity of galactosyltransferase in the
mammary gland making glucose a good acceptor substrate for this enzyme.

## GENE INFORMATION

UniProt ID<br>P00711

