

## Certificate of Analysis

**Product:** CSM-His-Leu-Trp**Catalog No.:** 4530-1x2; 4530-112; 4530-122**Lot No.:** 87350**FORMULATION:**

Drop-Out	Supplementsmg/L
Adenine	10
L-Arginine	HCl 50
L-Aspartic	Acid80
L-Histidine	HCl0
L-Isoleucine	50
L-Leucine	0
L-Lysine HCl	50
L-Methionine	20
L-Phenylalanine	50
L-Threonine	100
L-Tryptophan	0
L-Tyrosine	50
Uracil	20
L-Valine	140
<b>Total</b>	<b>620</b>

**Recommended**

Add 0.62g of CSM-His-Leu-Trp to each liter of DOB (or DOBA) and autoclave at 121°C for 25 minutes for complete synthetic defined single drop-out medium for *S.cerevisiae*.

**Use:****Storage:**

Store CSM-His-Leu-Trp powder at ambient temperature (15-30°C). CSM powder is hygroscopic, therefore minimize exposure to air to prolong storage of powder mixture. Store sterile agar medium at 4°C. And liquid medium at 15-30°C in subdued light.

**Shelf Life:** Storage life in closed container: 4 years from the date the powder was made.

## Quality Assurance Information

All MP Biomedicals products are thoroughly tested to ensure reliable results in the laboratory. The following paragraphs describe media preparation and quality control procedures.

### Media

### Preparation:

Reagents are tested and chosen for their ability to promote optimum growth of yeast strains when combined in the DOB (or DOBA) with CSM-His-Leu-Trp formula. DOB (Drop Out Base) is 1.7g Yeast Nitrogen Base, 5g Ammonium Sulfate, 20g Dextrose per liter. DOBA is DOB with 17% agar. Chosen reagents are combined in the proper proportions according to the formulation listed in the certificate of analysis and milled to a powder which thoroughly blends the reagents for uniform distribution. A sample of the milled and blended formulation was used to prepare liquid medium (or plate medium) by adding 2.7g DOB (or 4.37g DOBA) powder and 0.062g of CSM-His-Leu-Trp to a 100mL of purified water. The combinations were mixed by hand for about 1 minute to dissolve the dextrose and autoclaved at 121°C for 25 minutes. After cooling to 50°C, plates of DOBA with CSM-His-Leu-Trp were poured.

### Quality

### Control

### Assay:

DOB (or DOBA) with CSM-His-Leu-Trp was visually inspected after autoclaving for complete dissolution of components. The pH of the medium was tested to insure that the proper specification was attained. Acceptable pH range is 4.0-4.8 for DOB with CSM-His-Leu-Trp, report result for DOBA with CSM-His-Leu-Trp. DOB (or DOBA) with CSM-His-Leu-Trp was tested by *S.cerevisiae* cell growth at 30°C for approximately 48 hours.

Results	of	Quality	Control	Assay:
DOB (or DOBA) with CSM-His-Leu-Trp liquid solution was determined to have			<b>some floating particles.</b>	
pH of solution of DOB with CSM-His-Leu-Trp was found to be			<b>4.23/35.5°C,</b>	
pH of solution of DOBA with CSM-His-Leu-Trp was found to be			<b>5.19/49.0°C.</b>	
The cell growth of DOB (or DOBA) with CSM-His-Leu-Trp passed the test.				

**Conclusions:** This lot of CSM-His-Leu-Trp is released for product sales.

06/06/2016 - John Huang, PhD  
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