SNAPSHOOT
ENGINEERED FOR A SAFER TOMORROW

현장을 이해하고, 필요한 솔루션을 연결합니다.

산업안전 · 추락방지 시스템
산업용 소재 · 건축자재
제품 제안부터 공급·시공·설치·교육까지



COMPANY INFORMATION

스냅슛 (SNAPSHOOT)

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TECHNICAL DOCUMENTS

인증서 · 데이터시트 · 기술자료

제품의 규격과 성능, 인증 및 적용 조건을 확인하기 위한 자료입니다.

ABOUT SNAPSHOOT

제품 공급을 넘어, 현장에 맞는 해결책으로

스냅슛은 산업현장의 작업 환경과 요구 조건을 바탕으로
적합한 제품과 시스템을 제안합니다. 현장 실사를 통해 설치 조건을 확인하고,
공급부터 시공·설치 및 사용 교육까지 필요한 과정을 함께합니다.

추락방지 시스템

안전대부착설비 · 수평·수직 라이프라인
레일 시스템 · 리지드 포스트

밀폐공간 진입·구조 솔루션

데빗암 · 삼각대 · 구조용 윈치
윈치 안전블록 · 구조장비

산업안전 보호구

전신형 안전대 · 랜야드 · 안전블록
작업 환경에 맞춘 개인보호구

산업용 소재·건축자재

산업용 테이프 · 접착제 · 기능성 소재
구조용 스크류 · 목조건축 자재

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홈페이지 바로가기 →
문서 라이브러리 바로가기 →
시공사례 바로가기 →
문의하기 →

본 페이지는 스냅슛의 자료 제공 안내용 표지입니다. 첨부된 인증서 및 기술자료의 발행 주체, 인증 대상과 적용 범위는 해당 원문을 기준으로 확인해 주세요.

Record ID: FS-TSS-0400 Revision Number: 4.0 Effective Date: 2024-01-22 12:00 AM EST

Columbia Agar Base (NCM0038)
700004416, 700004417, 700004418, 700004419
NCM0038

Intended Use
Columbia Agar Base is used with blood for the isolation and cultivation of a wide variety of fastidious microorganisms. Columbia Agar Base is not intended for use in the diagnosis of disease or other conditions in humans.

Description
A modification of the original Columbia Agar base formulation, Columbia Agar Base provides a medium that is suitable for use with both defibrinated horse and sheep blood. The peptone mixture provides a source of nitrogen, essential vitamins and amino acids. The starch provides a carbon source and sodium chloride maintains osmotic balance. Originally described as a general purpose nutritious agar base by Ellner *et al.* Columbia Agar is more frequently used when enriched by the addition of sterile blood. The medium is suitable for supporting the growth and determining hemolytic reactions of a variety of microorganisms

Typical Formulation

Columbia Peptone Mixture	23.0 g/L
Corn Starch	1.0 g/L
Sodium Chloride	5.0 g/L
Agar	12.0 g/L

Final pH: 7.3 ± 0.2 at 25°C
Formula may be adjusted and/or supplemented as required to meet performance specifications.

Precaution
Refer to SDS

Preparation
1. Suspend 41 grams of the medium in one liter of purified water.
2. Heat with frequent agitation and boil for one minute to completely dissolve the medium.
3. Autoclave at 121°C for 15 minutes.
4. Prepare 5 to 10% blood agar by adding appropriate volume of sterile defribrinated horse or sheep blood to melted sterile agar medium, cooled to 45-50°C.

Test Procedure
1. Process each sample as appropriate, and inoculate directly onto the surface of the medium. Streak for isolation with inoculating loop, and stab agar several times to deposit beta-hemolytic streptococci beneath agar surface. Subsurface growth will display the most reliable hemolytic reactions owing to the activity of both oxygen-stable and oxygen-labile streptolysins.
2. Incubate plates aerobically, anaerobically, microaerophilically, or under conditions of increased CO_2 (5 - 10%) in accordance with established laboratory procedures.

Quality Control Specifications
Dehydrated Appearance: Powder is homogeneous, free flowing and beige.

Prepared Appearance: Prepared medium without blood is beige, cloudy, and with no precipitate. With 5% sheep blood the medium is red and opaque.

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Record ID: FS-TSS-0400 Revision Number: 4.0 Effective Date: 2024-01-22 12:00 AM EST

Expected Cultural Response: Cultural response on Columbia Agar Base at 36-38ºC and 41.5 ± 1 ºC for *Campylobacter,* after 18 - 48 hours incubation.

Microorganism	Approx. Inoculum (CFU)	Expected Results	
		Growth	Hemolysis
Campylobacter jejuni ATCC® 29428	4 Quad streak	Growth	N/A
Escherichia coli ATCC® 25922	4 Quad streak	Growth	N/A
Enterococcus faecalis ATCC® 29212	4 Quad streak	Growth	N/A
Staphylococcus aureus ATCC® 25923	4 Quad streak	Growth	N/A
Pseudomonas aeruginosa ATCC® 27853	4 Quad streak	Growth	N/A
Streptococcus pneumoniae ATCC® 6305	4 Quad streak	Growth	Alpha hemolysis
Streptococcus pyogenes ATCC® 19615	50-200	> 70%	Beta hemolysis

The organisms listed are the minimum that should be used for quality control testing.

Results

Examine the medium for growth and hemolytic reactions after 18 - 24 and 48 hours incubation. There are four types of hemolysis on blood agar media described as:

1. Alpha hemolysis (α) is the reduction of hemoglobin to methemoglobin in the medium surrounding the colony. This produces a green discoloration of the medium.
2. Beta hemolysis (β) is the lysis of red blood cells, producing a clear zone surrounding the colony.
3. Gamma hemolysis (γ) indicates no hemolysis. No destruction of red blood cells occurs and there is no change in the medium.
4. Alpha-prime-hemolysis (α') is a small zone of complete hemolysis that is surrounded by an area of partial lysis.

Expiration

Refer to expiration date stamped on the container. The dehydrated medium should be discarded if not free flowing, or if appearance has changed from the original color. Expiry applies to medium in its intact container when stored as directed.

Limitations of the Procedure

1. Due to nutritional variation, some strains may be encountered that grow poorly or fail to grow on this medium.
2. Hemolytic reactions of some strains of group D streptococci have been shown to be affected by differences in animal blood. Such strains are beta-hemolytic on horse, human, and rabbit blood agar and alpha-hemolytic on sheep blood agar.
3. Atmosphere of incubation has been shown to influence hemolytic reactions of beta-hemolytic streptococci. For optimal performance, incubate blood agar base media under increased CO_2 (5 - 10%) in accordance with established laboratory procedures.

Storage

Store dehydrated culture media at 2-30°C away from direct sunlight. Once opened and recapped, place container in a low humidity environment at the same storage temperature. Protect from moisture and light by keeping container tightly closed.

References

1. Ellner, P.D., Stoessel, C.J., Drakeford, E. and Vasi, F. (1966). A new culture medium for medical bacteriology. *Amer J. Clin Pathol.* 45. 502-504.