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BP1006 Polyclonal Antibody to Candida albicans - Purified

Alternate names: C. albicans

Quantity: 1 ml

Concentration: 4-5 mg/ml (OD280 nm, E0.1% = 1.4)

Background: *Candida albicans* is the most frequently isolated fungal pathogen of Humans, affecting immunocompromised patients ranging from premature infants to AIDS sufferers. Systemic infections have an attributed mortality of 30-50%. *C. albicans* is a diploid organism which has eight sets of homologous chromosomes. It has a genome of approximately 16 Mb (haploid), about 30% greater than S. cerevisiae (baker's yeast).

Host: Rabbit

Immunogen: Candida albicans, type A (ATTCC #32354).

Format: **State:** Liquid purified Ig fraction (>95% pure)
Purification: Protein A Chromatography
Buffer System: 0.01M PBS, pH 7.2 containing 0.09% Sodium Azide as preservative without stabilizing proteins

Applications: **ELISA.**
Immunofluorescence.
Immunohistochemistry.
Double Diffusion.
CIE (Counter Immunoelectrophoresis).
Also suitable for Conjugation purposes.
Use neat in gel-precipitin reactions.
Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.

Specificity: Recognizes numerous proteins in a soluble *C. albicans* extract (IEP).
Has not been absorbed and does cross-react with other Yeasts.
Negative against Human serum, urine and spinal fluid.

Storage: Store undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer.
Avoid repeated freezing and thawing.
Shelf life: one year from despatch.

Product Citations: **Purchased from Acris:**
1. Schild L, Heyken A, de Groot PW, Hiller E, Mock M, de Koster C, et al. Proteolytic cleavage of covalently linked cell wall proteins by Candida albicans Sap9 and Sap10. Eukaryot Cell. 2011 Jan;10(1):98-109. doi: 10.1128/EC.00210-10. Epub 2010 Nov 19. PubMed PMID: 21097664.
2. Goyer M, Loiselet A, Bon F, L'Ollivier C, Laue M, Holland G, et al. Intestinal Cell Tight Junctions Limit Invasion of Candida albicans through Active Penetration and Endocytosis in the Early Stages of the Interaction of the Fungus with the Intestinal Barrier. PLoS One. 2016 Mar 2;11(3):e0149159. doi: 10.1371/journal.pone.0149159. eCollection 2016. PubMed PMID: 26933885.

3. Klaile, E;Müller, MM;Schäfer, MR;Clauder, AK;Feer, S;Heyl, KA;Stock, M;Klassert, TE;Zipfel, PF;Singer, BB;Slevogt, H. Binding of Candida albicans to Human CEACAM1 and CEACAM6 Modulates the Inflammatory Response of Intestinal Epithelial Cells MBio 2017. 8, 2. PubMed PMID: 28292985.
4. Allert, S;Förster, TM;Svensson, CM;Richardson, JP;Pawlik, T;Hebecker, B;Rudolphi, S;Juraschitz, M;Schaller, M;Blagojevic, M;Morschhäuser, J;Figge, MT;Jacobsen, ID;Naglik, JR;Kasper, L;Mogavero, S;Hube, B. Candida albicans-Induced Epithelial Damage Mediates Translocation through Intestinal Barriers. MBio 2018, 9, 3. PubMed PMID: 29871918

General Readings:

1. Brand A, Vacharaksa A, Bendel C, Norton J, Haynes P, Henry-Stanley M, et al. An internal polarity landmark is important for externally induced hyphal behaviors in Candida albicans. Eukaryot Cell. 2008 Apr;7(4):712-20. doi: 10.1128/EC.00453-07. Epub 2008 Feb 15. PubMed PMID: 18281602.
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3. Tsuchimori N, Sharkey LL, Fonzi WA, French SW, Edwards JE, Filler SG. Reduced virulence of HWP1-deficient mutants of Candida albicans and their interactions with host cells. Infect Immun. 2000 Apr;68(4):1997-2002. PubMed PMID: 10722594.
4. Phan QT, Fratti RA, Prasadarao NV, Edwards JE, Filler SG. N-cadherin mediates endocytosis of Candida albicans by endothelial cells. J Biol Chem. 2005 Mar 18;280(11):10455-61. Epub 2005 Jan 4. PubMed PMID: 15632157.
5. Phan QT, Belanger PH, Filler SG. Role of hyphal formation in interactions of Candida albicans with endothelial cells. Infect Immun. 2000 Jun;68(6):3485-90. PubMed PMID: 10816502.
6. Martinez-Lopez R, Park H, Myers CL, Gil C, Filler SG. Candida albicans Ecm33p is important for normal cell wall architecture and interactions with host cells. Eukaryot Cell. 2006 Jan;5(1):140-7. PubMed PMID: 16400176.
7. Palmer GE, Kelly MN, Sturtevant JE. The Candida albicans vacuole is required for differentiation and efficient macrophage killing. Eukaryot Cell. 2005 Oct;4(10):1677-86. PubMed PMID: 16215175.