Silantes
Stable Isotope Labeled Biomolecules

RICH GROWTH MEDIA

POWDER

LABELED WITH STABLE ISOTOPES (^{2}H, ^{13}C, ^{15}N)

Silantes GmbH - Gollierstrasse 70c D-80339 Munich, Germany

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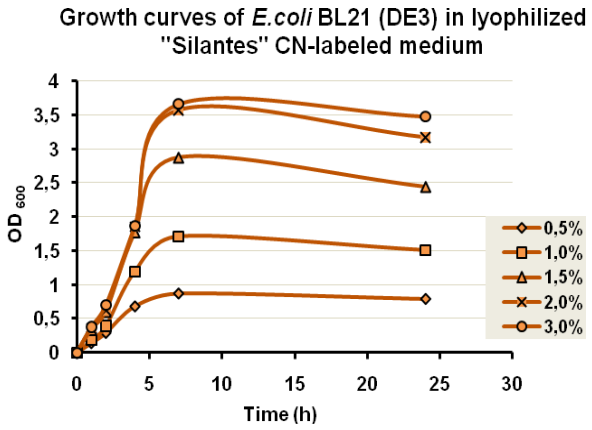
SILANTES OD – MEDIA

Rich Growth Media for *E. coli* (Powder)

Product-N°:	Description	labeled (> 98%)	Quantity
115104100	**Silantes D-powder**	^{2}H	1g
115204100	**Silantes C-powder**	^{13}C	1g
115304100	**Silantes N-powder**	^{15}N	1g
115504100	**Silantes DN-powder**	^{2}H, ^{15}N	1g
115604100	**Silantes CN-powder**	^{13}C, ^{15}N	1g
115704100	**Silantes CDN-powder**	^{2}H, ^{13}C, ^{15}N	1g

Fig 3.



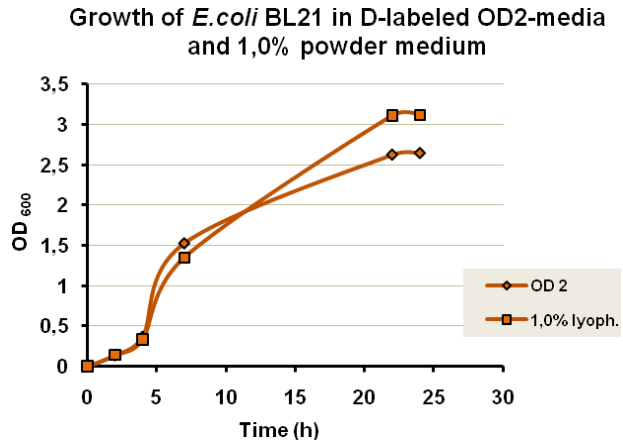
COMPARISON OF SOLUTION MEDIA AND POWDER MEDIA

Silantes rich growth media can be obtained

- As ready made solution (Fig.1 and Fif.2) or
- As powder.

Fig. 3 shows the OD obtained with different amounts of lyophylized powder.

Fig.4



ISOTOPE ENRICHMENT

Silantes media, solution as well as powder, can be obtained in any combination of the stable Isotopes (^{2}H, ^{13}C,^{15}N) with an enrichment of >98%.

The biological competence of the media is assured by a quality control protocol (growth curve of the delivered media) is provided with each delivery.

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SILANTES OD-MEDIA FOR HETEROLOGOUS EXPRESSION IN E. COLI

Silantes OD-media are the media of choice, if expression of proteins in minimal media using ^{13}C-glucose is difficult or impossible. As an example human ubiquitin is expressed. Fig. 5a shows the growth curve and Fig. 5b the page

Fig. 5a

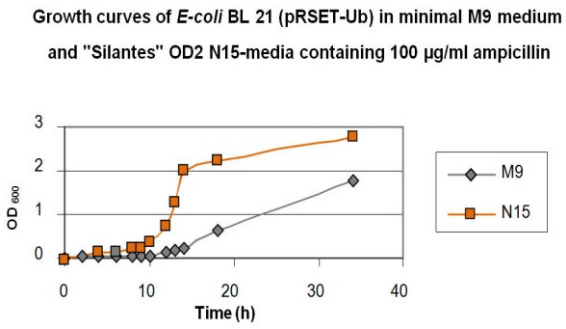
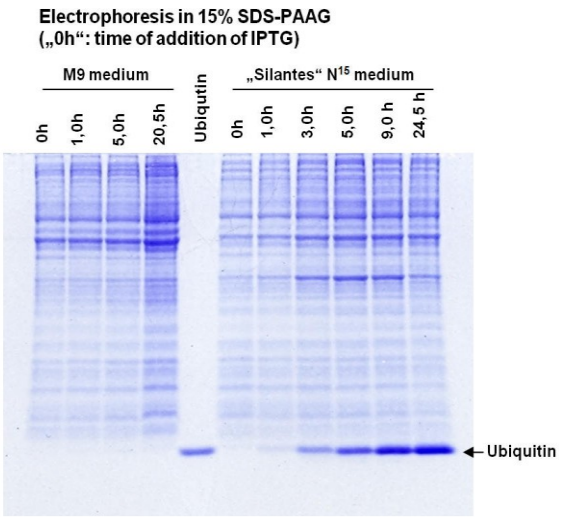


Fig. 5b



EXPRESSION IN SILANTES OD-MEDIA VS. OTHER PROVIDERS

Fig 6a shows the growth curves of 1% powderCN- media from Silantes and two other providers. Fig 6b shows the expression of h-ubiquitin

Fig. 6b

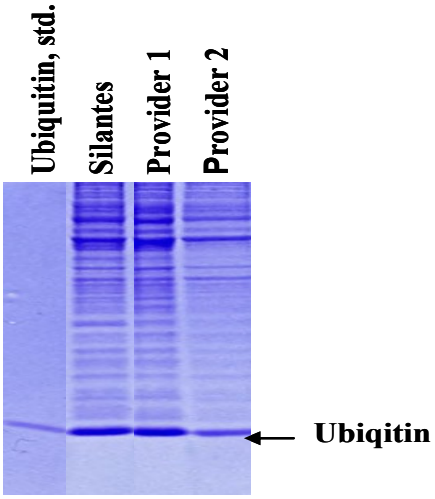
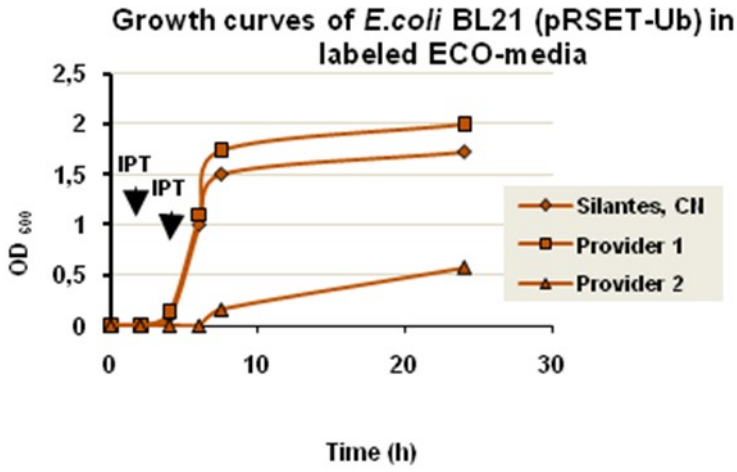


Fig. 6a



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Amino Acid Composition

Amino Acid	AA [µmol / l OD1]	% of Total
Asp	50,26	20,56
Thr	8,95	3,7
Ser	9,97	4,1
Glu	27,23	11,1
Gly	27,18	11,1
Ala	36,18	14,8
Val	7,29	2,98
Met	4,35	1,78
Ileu	5,15	2,1
Leu	12,85	5,26
Tyr	4,4	1,8
Phe	5,94	2,4
His	23,59	9,65
Lys	8,26	3,38
Arg	5,53	2,3
Pro	7,31	2,99