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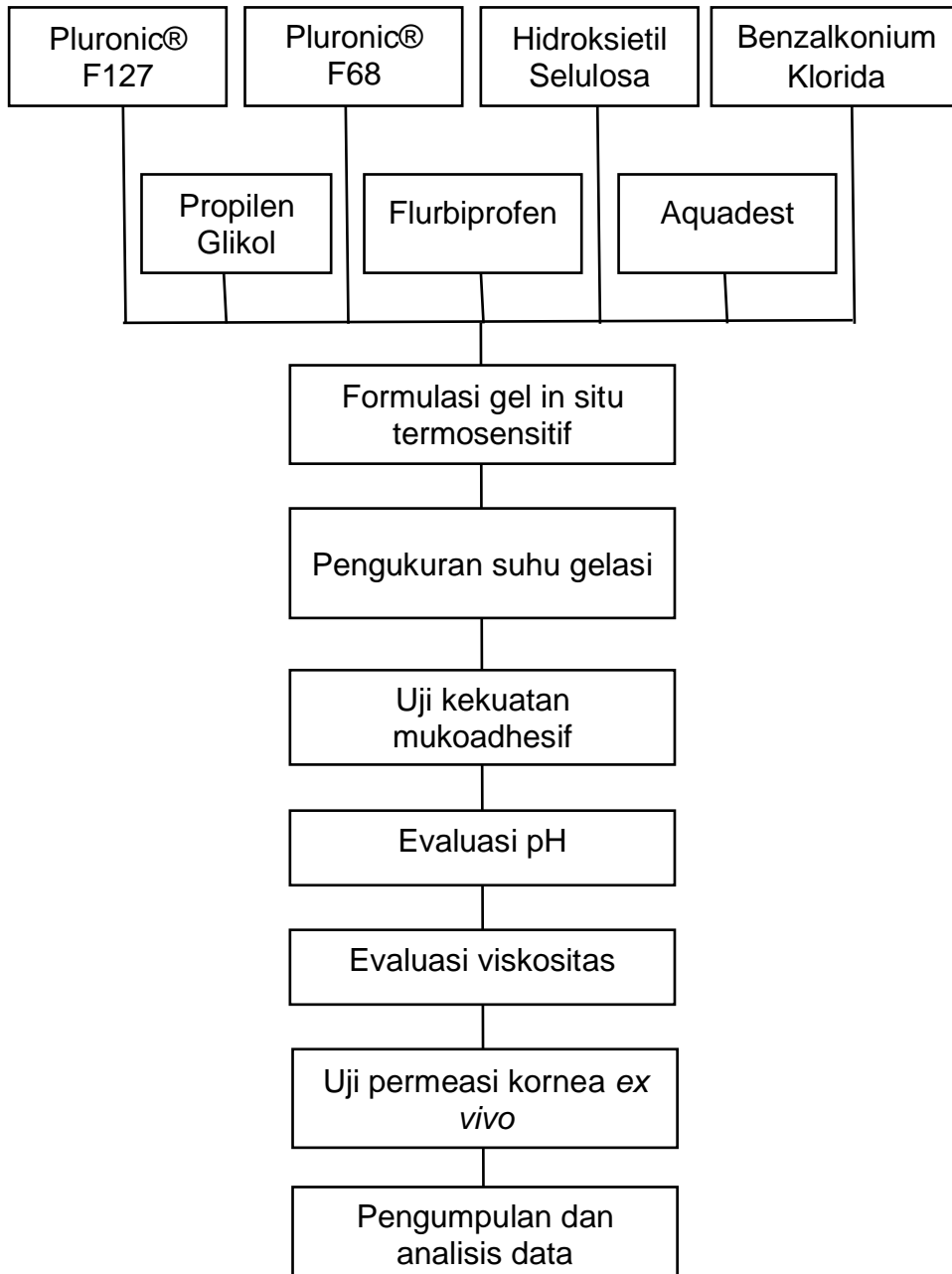
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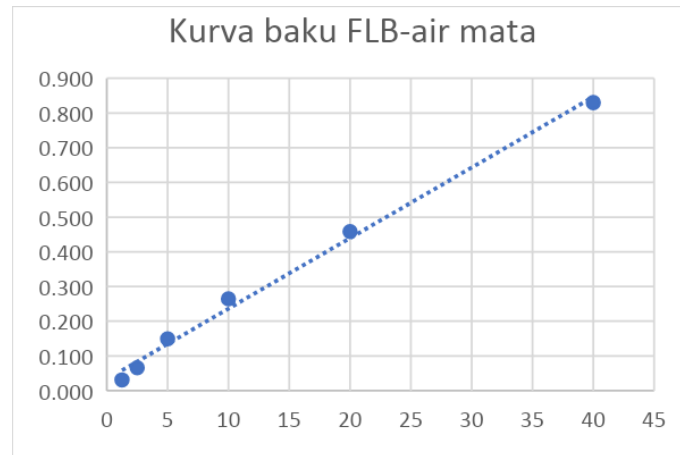
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## LAMPIRAN

### Lampiran 1. Skema Kerja

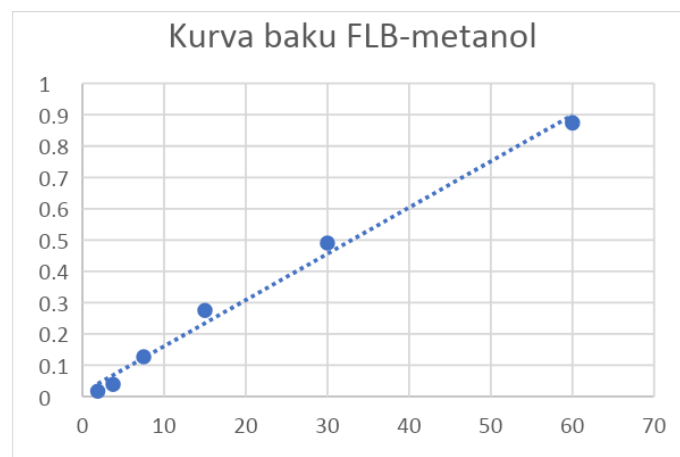


**Lampiran 2. Panjang gelombang maksimum dan kurva baku  
Flurbiprofen dalam air mata**



**Gambar 14. Kurva baku FLB-air mata**

**Lampiran 3. Panjang gelombang maksimum dan kurva baku  
Flurbiprofen dalam metanol**



**Gambar 15. Kurva baku FLB-metanol**

**Lampiran 4. Perhitungan data**

**Lampiran 4.1 Perhitungan uji permeasi *ex vivo***

Persamaan:  $y = 0,0203x + 0,0329$

Keterangan:

x = konsentrasi

y = absorbansi

Untuk F4 replikasi 1 pada jam ke 24 diperoleh absorbansi = 0,502 dengan faktor pengenceran = 8

$$y = 0,0203x + 0,0329$$

$$0,502 = 0,0203x + 0,0329$$

$$x = \frac{(0,502 - 0,0329)}{0,0203}$$

x = 23,10 x faktor pengenceran

$$x = 23,10 \times 8 = 184,80 \mu g/mL$$

Konsentrasi dalam 1 ml = 184,80  $\mu g/mL$  x 1 ml

$$= \frac{184,80 \mu g}{1000}$$

$$= 0,18480 \text{ mg}$$

Konsentrasi dalam 13 mL = 0,18480 x 13 mL

$$= 2,40 \text{ mg}$$

Faktor koreksi =  $\frac{\text{konsentrasi jam sebelumnya}}{1000} +$

*faktor koreksi jam sebelumnya*

$$= \frac{47,33}{1000} + 0,52$$



$$= 0,57$$

$$\begin{aligned} \text{Jumlah terpermeasi} &= \text{konsentrasi dalam 13 mL} + \text{faktor koreksi} \\ &= 2,40 \text{ mg} + 0,57 = 2,97 \text{ mg} \end{aligned}$$

#### Lampiran 4.1 Perhitungan uji retensi

$$\text{Persamaan; } y = 0,0148x + 0,0126$$

Keterangan:

x = konsentrasi

y = absorbansi

Untuk F4 replikasi 1 diperoleh absorbansi = 0,625

$$y = 0,0148x + 0,0126$$

$$0,625 = 0,0148x + 0,0126$$

$$x = \frac{(0,625 - 0,0126)}{0,0148} = 41,38 \mu\text{g/mL}$$

$$x = \frac{41,38}{1000} = 0,04 \text{ mg}$$

Jumlah FLB yang terdeposisi = 0,04 mg

#### Lampiran 5. Tabel hasil evaluasi

##### Lampiran 5.1 Kurva baku FLB dalam air mata

**Tabel 2. Kurva baku FLB dalam air mata**

Konsentrasi (ppm)	Absorbansi			Rata-rata
	Replikasi 1	Replikasi 2	Replikasi 3	
40	0,844	0,811	0,835	0,830

20	0,464	0,433	0,478	0,458
10	0,275	0,257	0,262	0,265
5	0,171	0,132	0,144	0,149
2,5	0,073	0,060	0,064	0,066
1,25	0,030	0,033	0,030	0,031

### Lampiran 5.2 Kurva baku FLB dalam metanol

**Tabel 3. Kurva baku FLB dalam metanol**

Konsentrasi (ppm)	Absorbansi			Rata- rata
	Replikasi 1	Replikasi 2	Replikasi 3	
60	0,869	0,870	0,883	0,874
30	0,491	0,489	0,491	0,490
15	0,27	0,275	0,279	0,275
7,5	0,123	0,128	0,129	0,127
3,75	0,031	0,035	0,049	0,038
1,875	0,016	0,016	0,019	0,017

### Lampiran 5.3 Uji pH

**Tabel 4. Uji pH**

Formula	replikasi 1	replikasi 2	replikasi 3	rata-rata	SD
F1	6,88	6,89	6,87	6,88	0,01
F2	6,98	6,95	6,99	6,97	0,02
F3	7,13	7,1	7,09	7,11	0,02
F4	7,38	7,35	7,36	7,36	0,02

### Lampiran 5.4 Uji suhu gelas

**Tabel 5. Uji suhu gelas**

Formula	Replikasi 1	Replikasi 2	Replikasi 3	Rata- rata	SD
F1	28	30	30	29,33	1,15
F2	31	31	32	31,33	0,58
F3	32	32	33	32,33	0,58
F4	35	37	38	36,67	1,53

## Lampiran 5.5 Uji viskositas

### Lampiran 5.5.1 Uji viskositas suhu 4°C

**Tabel 6. Uji viskositas suhu 4°C**

Formula	Suhu	Kecepatan (rpm)	Viskositas (cps)			Rata-rata	SD
			Replikasi 1	Replikasi 2	Replikasi 3		
F1	4°C	60	217,5	220	215	217,5	2,5
F2	4°C	60	190	177,5	165	177,5	12,5
F3	4°C	60	147,5	165	167,5	160	10,90
F4	4°C	60	120	115	140	125	13,23

### Lampiran 5.5.2 Uji viskositas suhu 25°C

**Tabel 7. Uji viskositas suhu 25°C**

Formula	Suhu	Kecepatan (rpm)	Viskositas (cps)			Rata-rata	SD
			Replikasi 1	Replikasi 2	Replikasi 3		
F1	25°C	50	21	21,5	20	16800	17200
F2	25°C	50	16	16	16,5	12800	12800
F3	25°C	50	14	15,5	14,5	11200	12400
F4	25°C	50	2,5	2	1,5	2000	1600

### Lampiran 5.5.3 Uji viskositas suhu 35°C

**Tabel 8. Uji viskositas suhu 35°C**

Formula	Suhu	Kecepatan (rpm)	Viskositas (cps)			Rata-rata	SD
			Replikasi 1	Replikasi 2	Replikasi 3		
F1	35°C	50	35,5	33,5	34	28400	26800
F2	35°C	50	32	33,5	34	25600	26800
F3	35°C	50	28,5	27,5	27	22800	22000
F4	35°C	50	5	3,5	3,5	4000	2800

## Lampiran 5.6 Uji reologi

### Lampiran 5.6.1 Uji reologi F1

**Tabel 9. Uji reologi F1**

Kecepatan (Rpm)	Faktor	Torsi (%)	Rata-Rata	Viskositas
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		Replikasi 1	Replikasi 2	Replikasi 3		
5	8000	22,5	27	25,5	25	200000
10	4000	18,5	30	26	24,83	99333,33
20	2000	21	19	17	19	38000
50	800	23,5	31	20,5	25	20000
100	400	26	24	24	24,67	9866,67

### Lampiran 5.6.2 Uji reologi F2

**Tabel 10. Uji reologi F2**

Kecepatan (rpm)	Faktor	Torsi (%)			rata-rata	viskositas
		replikasi 1	replikasi 2	replikasi 3		
5	8000	23	16,5	23,5	21	168000
10	4000	20	21	19	20	80000
20	2000	26	31	29,5	28,83	57666,67
50	800	36	32	34	34	27200
100	400	43,5	45,5	38,5	42,5	17000

### Lampiran 5.6.3 Uji reologi F3

**Tabel 11. Uji reologi F3**

Kecepatan (rpm)	Faktor	Torsi (%)			Rata-rata	Viskositas
		Replikasi 1	Replikasi 2	Replikasi 3		
5	8000	30,5	34	35,5	33,33	266666,7
10	4000	33	23,5	25,5	27,33	109333,3
20	2000	28	31	22	27	54000
50	800	36,5	30,5	28,5	31,83	25466,67
100	400	32,5	36	36	34,83	13933,33

### Lampiran 5.6.4 Uji reologi F4

**Tabel 12. Uji reologi F4**

Kecepatan (rpm)	Faktor	Torsi (%)			rata-rata	viskositas
		replikasi 1	replikasi 2	replikasi 3		
5	8000	26	24	18	22,67	181333,3
10	4000	27,5	32	24	27,83	111333,3
20	2000	34,5	28,5	34,5	32,5	65000
50	800	35,5	31	33	33,17	26533,33
100	400	31	27,5	26,5	28,33	11333,33

### Lampiran 5.7 Uji kekuatan mukoadhesif

**Tabel 13. Uji kekuatan mukoadhesif**

Formul a	bobot yang dibutuhkan			luas permukaan mukosa	percepatan gravitasi (cm <sup>2</sup> )	Kekuatan mukoadhesif				
	replikasi i 1	replikasi 2	replikasi i 3			replikasi 1	replikasi 2	replikasi 3	rata-rata	SD
F1	44000	39000	48000	710	980	61,95	54,91	67,58	61,48	6,35
F2	29000	29000	29000	710	980	40,83	40,83	40,83	40,83	0,00
F3	19000	29000	29000	710	980	26,75	40,83	40,83	36,14	8,13
F4	9000	9000	9000	710	980	12,67	12,67	12,67	12,67	0,00

### Lampiran 5.8 Uji permeasi *ex vivo*

#### Lampiran 5.8.1 Uji permeasi *ex vivo* F1

**Tabel 14. Uji permeasi *ex vivo* F1**

Jam	Serapan (Abs)	fp	Konsentrasi (µg/ml)	13 ml (mg)	Faktor Koreksi	FLB yang terpermeasi	Rata-rata (mg)	SD	Persen permeasi (%)	Rata- rata (%)	SD
0,25	0,541	1	25,03	0,33	0	0,33	0,33	0,002	0,03	0,03	0,00023 1
	0,548	1	25,37	0,33	0	0,33			0,03		
	0,546	1	25,28	0,33	0	0,33			0,03		
0,5	0,542	1	25,08	0,33	0,03	0,35	0,36	0,008	0,04	0,04	0,00079
	0,566	1	26,26	0,34	0,03	0,37			0,04		
	0,556	1	25,77	0,33	0,03	0,36			0,04		

	0,568	1	26,36	0,34	0,05	0,39			0,04			
0,75	0,564	1	26,16	0,34	0,05	0,39	0,39	0,002	0,04	0,04	0,00018	—
	0,561	1	26,01	0,34	0,05	0,39			0,04		2	—
	0,615	1	28,67	0,37	0,08	0,45			0,04			
1	0,624	1	29,12	0,38	0,08	0,46	0,45	0,004	0,05	0,05	0,00042	—
	0,626	1	29,22	0,38	0,08	0,46			0,05		6	—
	0,836	1	39,56	0,51	0,11	0,62			0,06			
2	0,841	1	39,81	0,52	0,11	0,62	0,62	0,004	0,06	0,06	0,00041	—
	0,829	1	39,22	0,51	0,11	0,62			0,06		9	—
	0,314	4	55,39	0,72	0,14	0,86			0,09			
3	0,315	4	55,59	0,72	0,15	0,87	0,87	0,002	0,09	0,09	0,00023	—
	0,315	4	55,59	0,72	0,15	0,87			0,09		7	—
	0,31	4	54,60	0,71	0,20	0,91			0,09			
4	0,312	4	55,00	0,71	0,20	0,92	0,92	0,006	0,09	0,09	0,00057	—
	0,314	4	55,39	0,72	0,20	0,92			0,09			
	0,193	8	63,09	0,82	0,25	1,07			0,11			
5	0,195	8	63,88	0,83	0,26	1,09	1,08	0,007	0,11	0,11	0,00071	—
	0,195	8	63,88	0,83	0,26	1,09			0,11		9	—
	0,198	8	65,06	0,85	0,32	1,16			0,12			
6	0,202	8	66,64	0,87	0,32	1,19	1,18	0,015	0,12	0,12	0,00151	—
	0,203	8	67,03	0,87	0,32	1,19			0,12		8	—
	0,203	8	67,03	0,87	0,38	1,25			0,13			
7	0,206	8	68,22	0,89	0,39	1,27	1,27	0,013	0,13	0,13	0,00133	—
	0,207	8	68,61	0,89	0,39	1,28			0,13			
8	0,191	8	62,31	0,81	0,45	1,26	1,28	0,016	0,13	0,13	0,00162	—

	0,194	8	63,49	0,83	0,46	1,28			0,13		
	0,196	8	64,28	0,84	0,46	1,29			0,13		
	0,384	8	138,36	1,80	0,51	2,31			0,23		
24	0,384	8	138,36	1,80	0,52	2,32	2,32	0,009	0,23	0,23	0,00092
	0,386	8	139,15	1,81	0,52	2,33			0,23		2

### Lampiran 5.8.2 Uji permeasi *ex vivo* F2

Tabel 15. Uji permeasi *ex vivo* F2

Jam	Serapan (Abs)	fp	Konsentrasi ( $\mu\text{g/ml}$ )	13 ml (mg)	Faktor Koreksi	FLB yang terpermeasi	Rata-rata (mg)	SD	Persen permeasi (%)	Rata-rata (%)	SD
0,25	0,650	1	30,40	0,40	0	0,40	0,40	0,002	0,04	0,04	0,00022
	0,650	1	30,40	0,40	0	0,40			0,04		
	0,656	1	30,69	0,40	0	0,40			0,04		
0,5	0,733	1	34,49	0,45	0,03	0,48	0,48	0,003	0,05	0,05	0,00027
	0,733	1	34,49	0,45	0,03	0,48			0,05		
	0,740	1	34,83	0,45	0,03	0,48			0,05		
0,75	0,746	1	35,13	0,46	0,06	0,52	0,52	0,003	0,05	0,05	0,00029
	0,746	1	35,13	0,46	0,06	0,52			0,05		
	0,753	1	35,47	0,46	0,07	0,53			0,05		
1	0,493	2	45,33005	0,59	0,10	0,69	0,69	0,004	0,07	0,07	0,00040
	0,498	2	45,82	0,60	0,10	0,70			0,07		
	0,498	2	45,82	0,60	0,10	0,70			0,07		
2	0,246	4	41,99015	0,55	0,15	0,69	0,69	0,005	0,07	0,07	

	0,246	4	41,99015	0,55	0,15	0,69			0,07		0,00051	—
	0,249	4	42,58	0,55	0,15	0,70			0,07		5	—
3	0,285	4	49,67	0,65	0,19	0,83			0,08		0,00091	—
	0,290	4	50,6601	0,66	0,19	0,85	0,84	0,009	0,08	0,08	1	—
	0,291	4	50,86	0,66	0,19	0,85			0,09			—
4	0,318	4	56,18	0,73	0,24	0,97			0,10		0,00106	—
	0,322	4	56,97	0,74	0,24	0,98	0,98	0,011	0,10	0,10	1	—
	0,325	4	57,56	0,75	0,24	0,99			0,10			—
5	0,579	2	53,80	0,70	0,29	0,99			0,10		0,00056	—
	0,580	2	53,90	0,70	0,30	1,00	1,00	0,006	0,10	0,10	3	—
	0,584	2	54,30	0,71	0,30	1,00			0,10			—
6	0,169	8	53,64	0,70	0,35	1,04			0,10		0,00103	—
	0,170	8	54,03	0,70	0,35	1,05	1,05	0,010	0,11	0,11	7	—
	0,172	8	54,82	0,71	0,35	1,06			0,11			—
7	0,643	2	60,11	0,78	0,40	1,18			0,12		0,00079	—
	0,650	2	60,80	0,79	0,40	1,19	1,19	0,008	0,12	0,12	9	—
	0,650	2	60,80	0,79	0,41	1,20			0,12			—
8	0,223	8	74,92	0,97	0,46	1,43			0,14		0,00214	—
	0,226	8	76,10	0,99	0,46	1,45	1,46	0,021	0,15	0,15	8	—
	0,230	8	77,67	1,01	0,47	1,48			0,15			—
24	0,475	8	174,2266	2,26	0,54	2,80			0,28		0,00132	—
	0,478	8	175,4089	2,28	0,54	2,82	2,82	0,013	0,28	0,28	8	—
	0,478	8	175,4089	2,28	0,55	2,83			0,28			—



### Lampiran 5.8.3 Uji permeasi *ex vivo* F3

**Tabel 16. Uji permeasi *ex vivo* F3**

Jam	Serapan (Abs)	fp	Konsentrasi ( $\mu\text{g/ml}$ )	13 ml (mg)	Faktor Koreksi	FLB yang terpermeasi	Rata-rata (mg)	SD	Persen permeasi (%)	Rata-rata (%)	SD	—
0,25	0,169	2	13,41	0,17	0	0,17	0,18	0,004	0,02	0,02	0,00037	—
	0,174	2	13,90	0,18	0	0,18						
	0,174	2	13,90	0,18	0	0,18						
0,5	0,239	2	20,31	0,26	0,01	0,28	0,28	0,005	0,03	0,03	0,00047	—
	0,242	2	20,60	0,27	0,01	0,28						
	0,246	2	21,00	0,27	0,01	0,29						
0,75	0,109	8	29,99	0,39	0,03	0,42	0,43	0,011	0,04	0,04	0,00108	—
	0,111	8	30,78	0,40	0,03	0,43						
	0,113	8	31,57	0,41	0,03	0,45						
1	0,134	8	39,84	0,52	0,06	0,58	0,59	0,010	0,06	0,06	0,00100	—
	0,134	8	39,84	0,52	0,07	0,58						
	0,137	8	41,02	0,53	0,07	0,60						
2	0,172	8	54,82	0,71	0,10	0,82	0,83	0,011	0,08	0,08	0,00105	—
	0,175	8	56,00	0,73	0,11	0,83						
	0,175	8	56,00	0,73	0,11	0,84						
3	0,216	8	72,16	0,94	0,16	1,10	1,12	0,019	0,11	0,11	0,00189	—
	0,221	8	74,13	0,96	0,16	1,12						
	0,222	8	74,52	0,97	0,16	1,13						
4	0,214	8	71,37	0,93	0,23	1,16	1,16	0,017	0,12	0,12		

	0,217	8	72,55	0,94	0,24	1,18			0,12		0,00166
	0,21	8	69,79	0,91	0,24	1,15			0,11		8
5	0,217	8	72,55	0,94	0,30	1,25	1,26	0,012	0,12	0,13	0,00122
	0,22	8	73,73	0,96	0,31	1,27			0,13		
	0,22	8	73,73	0,96	0,31	1,27			0,13		
6	0,235	8	79,65	1,04	0,37	1,41	1,42	0,006	0,14	0,14	0,00061
	0,235	8	79,65	1,04	0,38	1,42			0,14		
	0,236	8	80,04	1,04	0,38	1,42			0,14		
7	0,285	8	99,35	1,29	0,45	1,75	1,76	0,017	0,17	0,18	0,00169
	0,288	8	100,53	1,31	0,46	1,77			0,18		
	0,290	8	101,32	1,32	0,46	1,78			0,18		
8	0,276	8	95,80	1,25	0,55	1,80	1,82	0,018	0,18	0,18	0,00178
	0,279	8	96,99	1,26	0,56	1,82			0,18		
	0,281	8	97,77	1,27	0,56	1,83			0,18		
24	0,588	8	218,76	2,84	0,65	3,49	3,53	0,037	0,35	0,35	0,00365
	0,594	8	221,12	2,87	0,66	3,53			0,35		
	0,600	8	223,49	2,91	0,66	3,57			0,36		

#### Lampiran 5.8.4 Uji permeasi *ex vivo* F4

**Tabel 17. Uji permeasi *ex vivo* F4**

Jam	Serapan (Abs)	fp	Konsentrasi ( $\mu\text{g/ml}$ )	13 ml (mg)	Faktor Koreksi	FLB yang terpermeasi (mg)	Rata-rata (mg)	SD	Persen permeasi (%)	Rata-rata (%)	SD
0,25	0,08	8	18,56	0,24	0	0,24	0,25	0,01	0,02	0,03	

	0,084	8	20,14	0,26	0	0,26			0,03		0,00118
	0,084	8	20,14	0,26	0	0,26			0,03		3
0,5	0,143	8	43,39	0,56	0,02	0,58			0,06		0,00161
	0,146	8	44,57	0,58	0,02	0,60	0,60	0,02	0,06	0,06	6
	0,149	8	45,75	0,59	0,02	0,61			0,06		
0,75	0,152	8	46,94	0,61	0,06	0,67			0,07		0,00155
	0,156	8	48,51	0,63	0,06	0,70	0,69	0,02	0,07	0,07	7
	0,157	8	48,91	0,64	0,07	0,70			0,07		
1	0,142	8	43,00	0,56	0,11	0,67			0,07		0,00210
	0,146	8	44,57	0,58	0,11	0,69	0,69	0,02	0,07	0,07	1
	0,149	8	45,75	0,59	0,11	0,71			0,07		
2	0,19	8	61,91	0,80	0,15	0,96			0,10		0,00289
	0,183	8	59,15	0,77	0,16	0,93	0,93	0,03	0,09	0,09	7
	0,177	8	56,79	0,74	0,16	0,90			0,09		
3	0,174	8	55,61	0,72	0,21	0,94			0,09		
	0,176	8	56,39	0,73	0,22	0,95	0,95	0,01	0,10	0,10	0,00146
	0,179	8	57,58	0,75	0,22	0,97			0,10		
4	0,169	8	53,64	0,70	0,27	0,97			0,10		0,00157
	0,172	8	54,82	0,71	0,27	0,99	0,98	0,02	0,10	0,10	2
	0,174	8	55,61	0,72	0,27	1,00			0,10		
5	0,161	8	50,48	0,66	0,32	0,98			0,10		0,00167
	0,164	8	51,67	0,67	0,33	1,00	1,00	0,02	0,10	0,10	1
	0,166	8	52,45	0,68	0,33	1,01			0,10		
6	0,163	8	51,27	0,67	0,37	1,04	1,06	0,02	0,10	0,11	0,00204
	0,167	8	52,85	0,69	0,38	1,07			0,11		7

	0,169	8	53,64	0,70	0,38	1,08			0,11		
	0,158	8	49,30	0,64	0,42	1,07			0,11		
7	0,162	8	50,88	0,66	0,43	1,09	1,09	0,02	0,11	0,11	0,00216
	0,164	8	51,67	0,67	0,44	1,11			0,11		7
	0,153	8	47,33	0,62	0,47	1,09			0,11		
8	0,155	8	48,12	0,63	0,48	1,11	1,11	0,02	0,11	0,11	0,00150
	0,156	8	48,51	0,63	0,49	1,12			0,11		5
	0,502	8	184,87	2,40	0,52	2,92			0,29		
24	0,504	8	185,66	2,41	0,53	2,95	2,95	0,02	0,29	0,29	0,00204
	0,507	8	186,84	2,43	0,54	2,97			0,30		9

## Lampiran 5.9 Uji retensi

**Tabel 18. Uji retensi**

Formula	Absorbansi	Konsentrasi (µg/mL)	Konsentrasi (mg/mL)	Average (mg/mL)	SD
F1	0,496	32,66	0,03	0,03	0,0003
	0,505	33,27	0,03		
	0,502	33,07	0,03		
F2	0,503	33,27	0,03	0,03	0,0002
	0,505	33,27	0,03		
	0,510	33,61	0,03		
F3	0,710	47,12	0,05	0,05	0,0002
	0,711	47,19	0,05		
	0,706	46,85	0,05		
F4	0,625	60,57	0,06	0,06	0,0009
	0,631	61,51	0,06		
	0,632	62,32	0,06		

## Lampiran 6. Data hasil uji analisis statistika

### Lampiran 6.1 Uji pH

Tests of Normality							
	Formula	Kolmogorov-Smirnov <sup>a</sup>			Shapiro-Wilk		
		Statistic	df	Sig.	Statistic	df	Sig.
pH	F1	.175	3	.	1.000	3	1.000
	F2	.292	3	.	.923	3	.463
	F3	.292	3	.	.923	3	.463
	F4	.253	3	.	.964	3	.637

a. Lilliefors Significance Correction

### Multiple Comparisons

Dependent Variable: pH

	(I) Formula	(J) Formula	Mean	Std.	Sig.	95% Confidence Interval	
			Difference (I-J)	Error		Lower Bound	Upper Bound
Tukey HSD	F1	F2	-.09333*	.01414	<,001	-.1386	-.0480
		F3	-.22667*	.01414	<,001	-.2720	-.1814
		F4	-.48333*	.01414	<,001	-.5286	-.4380
	F2	F1	.09333*	.01414	<,001	.0480	.1386
		F3	-.13333*	.01414	<,001	-.1786	-.0880
		F4	-.39000*	.01414	<,001	-.4353	-.3447
	F3	F1	.22667*	.01414	<,001	.1814	.2720
		F2	.13333*	.01414	<,001	.0880	.1786
		F4	-.25667*	.01414	<,001	-.3020	-.2114
	F4	F1	.48333*	.01414	<,001	.4380	.5286

		F2	.39000*	.01414	<,001	.3447	.4353
		F3	.25667*	.01414	<,001	.2114	.3020
Game s- Howel I	F1	F2	-.09333*	.01333	.020	-.1596	-.0270
		F3	-.22667*	.01333	.002	-.2930	-.1604
	F2	F4	-.48333*	.01054	<,001	-.5298	-.4368
		F1	.09333*	.01333	.020	.0270	.1596
		F3	-.13333*	.01700	.005	-.2025	-.0641
	F3	F4	-.39000*	.01491	<,001	-.4535	-.3265
		F1	.22667*	.01333	.002	.1604	.2930
		F2	.13333*	.01700	.005	.0641	.2025
	F4	F4	-.25667*	.01491	<,001	-.3202	-.1932
		F1	.48333*	.01054	<,001	.4368	.5298
		F2	.39000*	.01491	<,001	.3265	.4535
			F3	.25667*	.01491	<,001	.1932

\*. The mean difference is significant at the 0.05 level.

## Lampiran 6.2 Uji viskositas

### Lampiran 6.2.1 Uji viskositas suhu 4°C

Tests of Normality							
	Formula	Kolmogorov-Smirnov <sup>a</sup>			Shapiro-Wilk		
		Statistic	df	Sig.	Statistic	df	Sig.
cPs	F1	.175	3	.	1.000	3	1.000
	F2	.175	3	.	1.000	3	1.000
	F3	.343	3	.	.842	3	.220
	F4	.314	3	.	.893	3	.363

a. Lilliefors Significance Correction

**Formula = F1**

### Post Hoc Tests

#### Multiple Comparisons

Dependent Variable: cps

	(I) Formula	(J) Formula	Mean	Std. Error	Sig.	95% Confidence Interval	
			Difference (I-J)			Lower Bound	Upper Bound
Tukey HSD	F1	F2	8.00000*	1.74404	.008	2.4150	13.5850
		F3	11.50000*	1.74404	<.001	5.9150	17.0850
		F4	18.50000*	1.74404	<.001	12.9150	24.0850
	F2	F1	-8.00000*	1.74404	.008	-13.5850	-2.4150
		F3	3.50000	1.74404	.262	-2.0850	9.0850
		F4	10.50000*	1.74404	.001	4.9150	16.0850
	F3	F1	-11.50000*	1.74404	<.001	-17.0850	-5.9150
		F2	-3.50000	1.74404	.262	-9.0850	2.0850
		F4	7.00000*	1.74404	.016	1.4150	12.5850
	F4	F1	-18.50000*	1.74404	<.001	-24.0850	-12.9150
		F2	-10.50000*	1.74404	.001	-16.0850	-4.9150
		F3	-7.00000*	1.74404	.016	-12.5850	-1.4150
Games-Howell	F1	F2	8.00000	1.47196	.069	-1.3904	17.3904
		F3	11.50000*	1.29099	.023	3.4533	19.5467
		F4	18.50000*	1.55456	.014	8.5012	28.4988
	F2	F1	-8.00000	1.47196	.069	-17.3904	1.3904
		F3	3.50000	1.91485	.381	-4.3678	11.3678
		F4	10.50000*	2.10159	.025	1.9311	19.0689
	F3	F1	-11.50000*	1.29099	.023	-19.5467	-3.4533
		F2	-3.50000	1.91485	.381	-11.3678	4.3678
		F4	7.00000	1.97906	.081	-1.2055	15.2055
	F4	F1	-18.50000*	1.55456	.014	-28.4988	-8.5012
		F2	-10.50000*	2.10159	.025	-19.0689	-1.9311
		F3	-7.00000	1.97906	.081	-15.2055	1.2055

\*. The mean difference is significant at the 0.05 level.

### Lampiran 6.2.2 Uji viskositas suhu 25°C

#### Tests of Normality

	Formula	Kolmogorov-Smirnov <sup>a</sup>			Shapiro-Wilk		
		Statistic	df	Sig.	Statistic	df	Sig.
cps	F1	.253	3	.	.964	3	.637
	F2	.385	3	.	.750	3	<.001
	F3	.253	3	.	.964	3	.637
	F4	.175	3	.	1.000	3	1.000

a. Lilliefors Significance Correction

#### Pairwise Comparisons of Formula

Sample 1-	Test Statistic	Std. Error	Std. Test Statistic	Sig.	Adj. Sig. <sup>a</sup>
Sample 2					

F4-F3	3.000	2.939	1.021	.307	1.000
F4-F2	6.000	2.939	2.042	.041	.247
F4-F1	9.000	2.939	3.063	.002	.013
F3-F2	3.000	2.939	1.021	.307	1.000
F3-F1	6.000	2.939	2.042	.041	.247
F2-F1	3.000	2.939	1.021	.307	1.000

Each row tests the null hypothesis that the Sample 1 and Sample 2 distributions are the same.

Asymptotic significances (2-sided tests) are displayed. The significance level is .050.

a. Significance values have been adjusted by the Bonferroni correction for multiple tests.

### Lampiran 6.2.3 Uji viskositas suhu 35°C

Tests of Normality							
	Formula	Kolmogorov-Smirnov <sup>a</sup>			Shapiro-Wilk		
		Statistic	df	Sig.	Statistic	df	Sig.
cps	F1	.292	3	.	.923	3	.463
	F2	.292	3	.	.923	3	.463
	F3	.253	3	.	.964	3	.637
	F4	.385	3	.	.750	3	<.001

a. Lilliefors Significance Correction

Pairwise Comparisons of Formula						
Sample 1- Sample 2	Test Statistic	Std. Error	Std. Test Statistic	Sig.	Adj. Sig. <sup>a</sup>	
F4-F3	3.000	2.928	1.024	.306	1.000	
F4-F2	6.667	2.928	2.277	.023	.137	
F4-F1	8.333	2.928	2.846	.004	.027	
F3-F2	3.667	2.928	1.252	.211	1.000	
F3-F1	5.333	2.928	1.821	.069	.411	
F2-F1	1.667	2.928	.569	.569	1.000	

Each row tests the null hypothesis that the Sample 1 and Sample 2 distributions are the same.

Asymptotic significances (2-sided tests) are displayed. The significance level is .050.

a. Significance values have been adjusted by the Bonferroni correction for multiple tests.

### Lampiran 6.3 Uji suhu gelas

Tests of Normality							
Formula	Kolmogorov-Smirnov <sup>a</sup>			Shapiro-Wilk			
	Statistic	df	Sig.	Statistic	df	Sig.	



Suhu_g elasi	F1	.385	3	.	.750	3	<,001
	F2	.385	3	.	.750	3	<,001
	F3	.385	3	.	.750	3	<,001
	F4	.253	3	.	.964	3	.637

a. Lilliefors Significance Correction

#### Pairwise Comparisons of Formula

Sample 1- Sample 2	Test Statistic	Std. Error	Std. Test Statistic	Sig.	Adj. Sig. <sup>a</sup>
F1-F2	-3.333	2.913	-1.144	.252	1.000
F1-F3	-5.667	2.913	-1.945	.052	.310
F1-F4	-9.000	2.913	-3.090	.002	.012
F2-F3	-2.333	2.913	-.801	.423	1.000
F2-F4	-5.667	2.913	-1.945	.052	.310
F3-F4	-3.333	2.913	-1.144	.252	1.000

Each row tests the null hypothesis that the Sample 1 and Sample 2 distributions are the same.

Asymptotic significances (2-sided tests) are displayed. The significance level is .050.

a. Significance values have been adjusted by the Bonferroni correction for multiple tests.

#### Lampiran 6.4 Uji kekuatan mukoadhesif

##### Tests of Normality

Formula	Kolmogorov-Smirnov <sup>a</sup>			Shapiro-Wilk			
	Statistic	df	Sig.	Statistic	df	Sig.	
Kekuatan_ mukoadhe sif	F1	.196	3	.	.996	3	.878
	F2	.	3	.	.	3	.
	F3	.385	3	.	.750	3	<,001
	F4	.	3	.	.	3	.

a. Lilliefors Significance Correction

#### Pairwise Comparisons of Formula

Sample 1-Sample 2	Test Statistic	Std. Error	Std. Test Statistic	Sig.	Adj. Sig. <sup>a</sup>
F4-F3	4.000	2.818	1.420	.156	.934
F4-F2	5.000	2.818	1.775	.076	.456
F4-F1	9.000	2.818	3.194	.001	.008
F3-F2	1.000	2.818	.355	.723	1.000
F3-F1	5.000	2.818	1.775	.076	.456
F2-F1	4.000	2.818	1.420	.156	.934

Each row tests the null hypothesis that the Sample 1 and Sample 2 distributions are the same. Asymptotic significances (2-sided tests) are displayed. The significance level is .050.  
a. Significance values have been adjusted by the Bonferroni correction for multiple tests.

### Lampiran 6.5 Uji permeasi ex vivo

Tests of Normality							
	Formula	Kolmogorov-Smirnov <sup>a</sup>			Shapiro-Wilk		
		Statistic	df	Sig.	Statistic	df	Sig.
mg	F1	.219	3	.	.987	3	.782
	F2	.312	3	.	.895	3	.371
	F3	.194	3	.	.996	3	.887
	F4	.175	3	.	1.000	3	1.000

a. Lilliefors Significance Correction

### Multiple Comparisons

Dependent Variable: FLBterpermeasi

	(I) Formula	(J) Formula	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Tukey HSD	F1	F2	-496151067.3333*	18324626.65787	<,001	-554832972.2485	-437469162.4182
		F3	-1211318555.0000*	18324626.65787	<,001	-1270000459.9152	-1152636650.0848
		F4	-625696223.3333*	18324626.65787	<,001	-684378128.2485	-567014318.4182
	F2	F1	496151067.3333*	18324626.65787	<,001	437469162.4182	554832972.2485
		F3	715167487.6667*	18324626.65787	<,001	773849392.5818	656485582.7515
		F4	129545156.0000*	18324626.65787	<,001	188227060.9152	-70863251.0848
	F3	F1	1211318555.0000*	18324626.65787	<,001	1152636650.0848	1270000459.9152
		F2	715167487.6667*	18324626.65787	<,001	656485582.7515	773849392.5818
		F4	585622331.6667*	18324626.65787	<,001	526940426.7515	644304236.5818
	F4	F1	625696223.3333*	18324626.65787	<,001	567014318.4182	684378128.2485
		F2	129545156.0000*	18324626.65787	<,001	70863251.0848	188227060.9152

	F3	- 585622331.6 6667*	18324626.6578 7	<,001	- 644304236.581 8	- 526940426.751 5	
Game s- Howel I	F2	- 496151067.3 3333*	9332675.41341	<,001	- 536542187.777 1	- 455759946.889 6	
	F3	- 1211318555. 00000*	21745252.0622 4	<,001	- 1344235873.22 90	- 1078401236.77 10	
	F4	- 625696223.3 3333*	12974423.7015 2	<,001	- 691905302.550 7	- 559487144.115 9	
	F2	F1	496151067.3 3333*	9332675.41341	<,001	455759946.889 6	536542187.777 1
		F3	- 715167487.6 6667*	22433194.4652 2	<,001	- 839036876.501 1	- 591298098.832 2
		F4	- 129545156.0 0000*	14097088.2472 4	.005	- 191980355.745 0	- -67109956.2550
	F3	F1	1211318555. 00000*	21745252.0622 4	<,001	1078401236.77 10	1344235873.22 90
		F2	715167487.6 6667*	22433194.4652 2	<,001	591298098.832 2	839036876.501 1
		F4	585622331.6 6667*	24176125.7013 8	<,001	472648364.622 9	698596298.710 4
	F4	F1	625696223.3 3333*	12974423.7015 2	<,001	559487144.115 9	691905302.550 7
		F2	129545156.0 0000*	14097088.2472 4	.005	67109956.2550	191980355.745 0
		F3	- 585622331.6 6667*	24176125.7013 8	<,001	- 698596298.710 4	- 472648364.622 9

\*. The mean difference is significant at the 0.05 level.

### Lampiran 6.6 Uji retensi

	Formula_ RET	Tests of Normality			Shapiro-Wilk		
		Kolmogorov-Smirnov <sup>a</sup> Statistic	df	Sig.	Statistic	df	Sig.
mg/mL	F1	.	3	.	.	3	.
	F2	.385	3	.	.750	3	<,001
	F3	.	3	.	.	3	.
	F4	.385	3	.	.750	3	<,001

a. Lilliefors Significance Correction

### Pairwise Comparisons of Formula\_RET

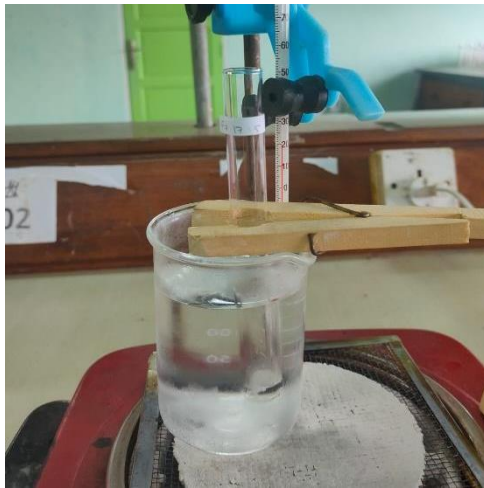
Sample 1- Sample 2	Test Statistic	Std. Error	Std. Test Statistic	Sig.	Adj. Sig. <sup>a</sup>
F1-F2	-1.000	2.812	-.356	.722	1.000
F1-F3	-5.000	2.812	-1.778	.075	.453
F1-F4	-8.000	2.812	-2.845	.004	.027
F2-F3	-4.000	2.812	-1.422	.155	.930
F2-F4	-7.000	2.812	-2.489	.013	.077
F3-F4	-3.000	2.812	-1.067	.286	1.000

Each row tests the null hypothesis that the Sample 1 and Sample 2 distributions are the same.

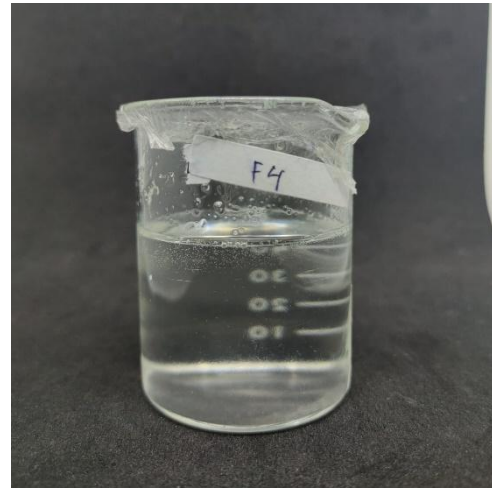
Asymptotic significances (2-sided tests) are displayed. The significance level is .050.

a. Significance values have been adjusted by the Bonferroni correction for multiple tests.

**Lampiran 7. Dokumentasi**



**Gambar 16. Orientasi Pluronic®**



**Gambar 17. Uji organoleptis**



**Gambar 18. Uji suhu gelas**



**Gambar 19. Kornea mata sapi**



**Gambar 20. Uji mukoadhesif**



**Gambar 21. Uji pH**



**Gambar 22. Uji retensi**



**Gambar 23. Uji viskositas dan reologi**