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LAMPIRAN GAMBAR PENELITIAN



ADAPTASI HEWAN COBA



ANESTESI HEWAN COBA



PENGUKURAN JARAK AWAL GIGI
INSISIVUS KE MOLAR MAKSILA



PEMASANGAN *CLOSED COIL SPRING*
DAN *FLOWABLE KOMPOSIT*



SONDASI KAFEIN DAN ETANOL



SACRIFICED HEWAN COBA,
SETELAH 3 DAN 7 HARI



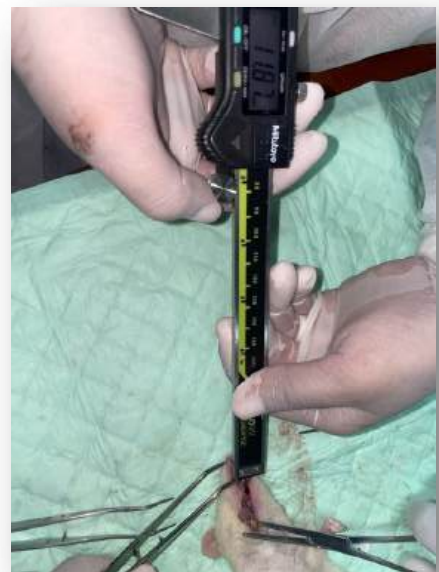
PERSIAPAN SAMPEL DAN PENGIRIMAN KE LAB



PEMBUATAN PREPARAT DAN SLIDE PADA AREA GIGI
INSISIVUS



PERHITUNGAN EKSPRESI BIOMARKER DAN
PENGAMATAN DENGAN METODE
IMUNOHISTOKIMIA (IHC)

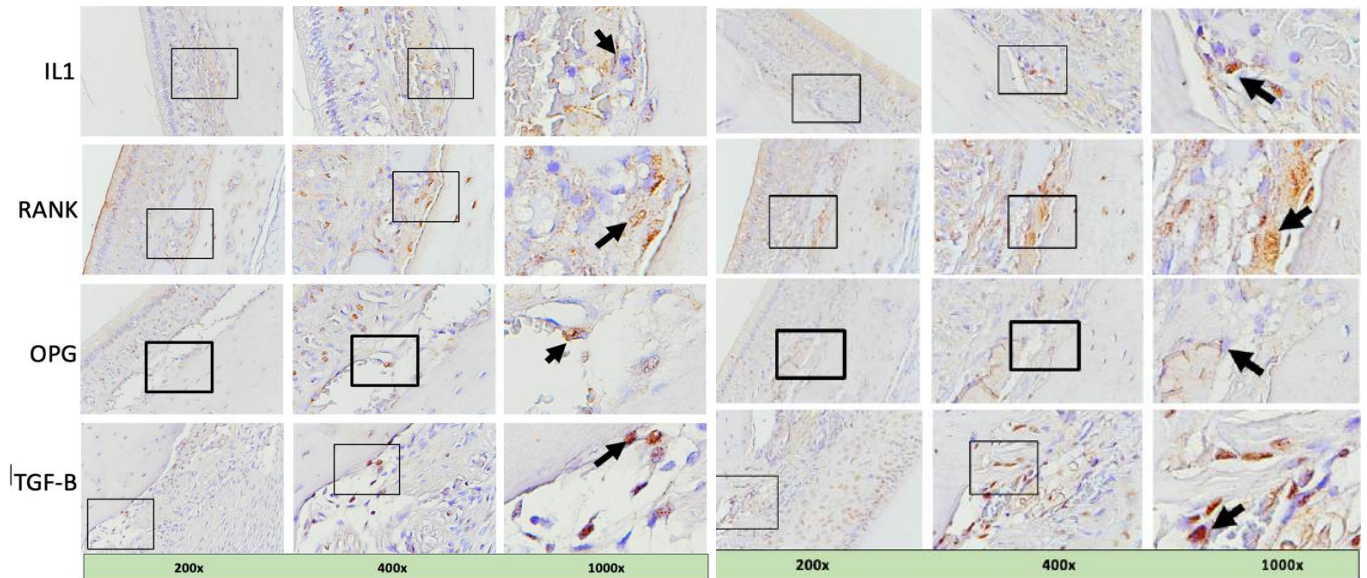


PENGUKURAN JARAK GIGI SETELAH
21 HARI

LAMPIRAN GAMBARAN IMUNOHISTOKIMIA HASIL PENELITIAN

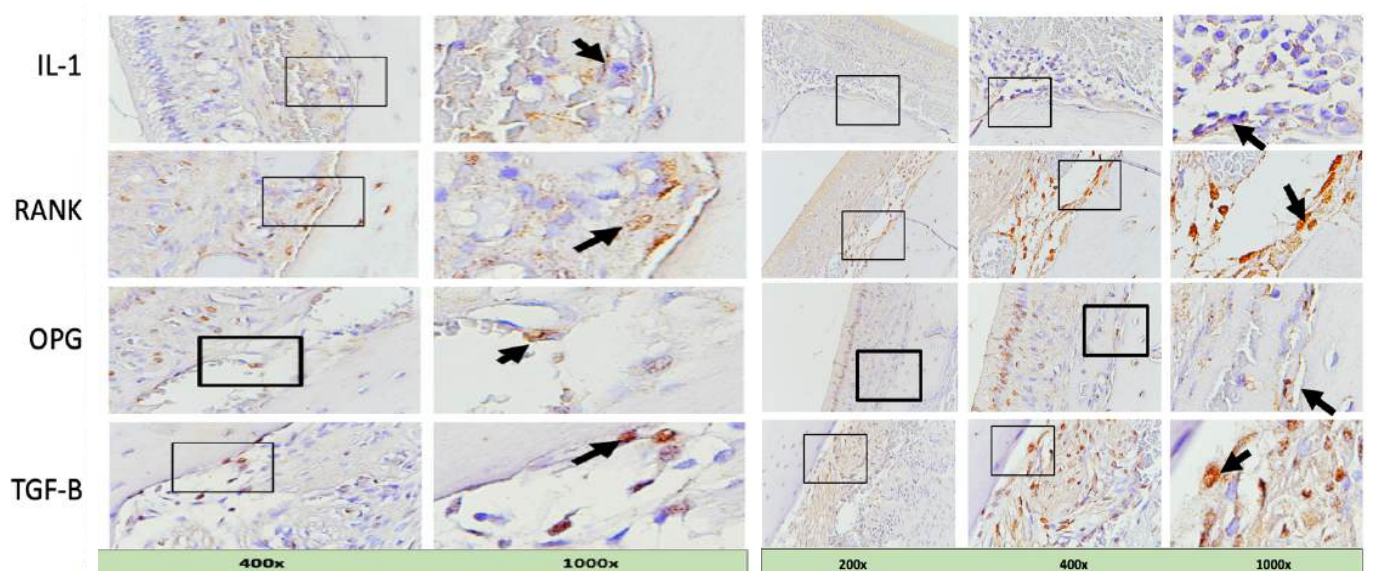
K1 (Gaya) hari ke-3

K2 (Gaya+kafein) hari ke-3



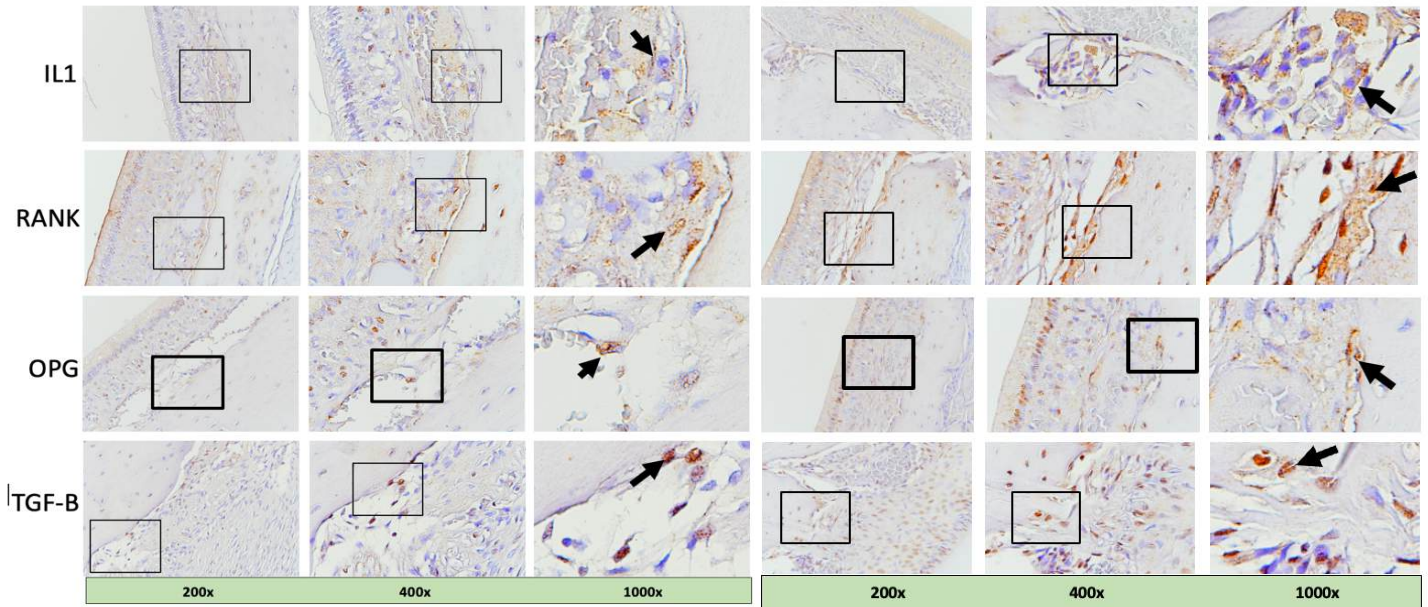
K1 (Gaya) hari ke-7

K2 (Gaya+kafein) hari ke-7



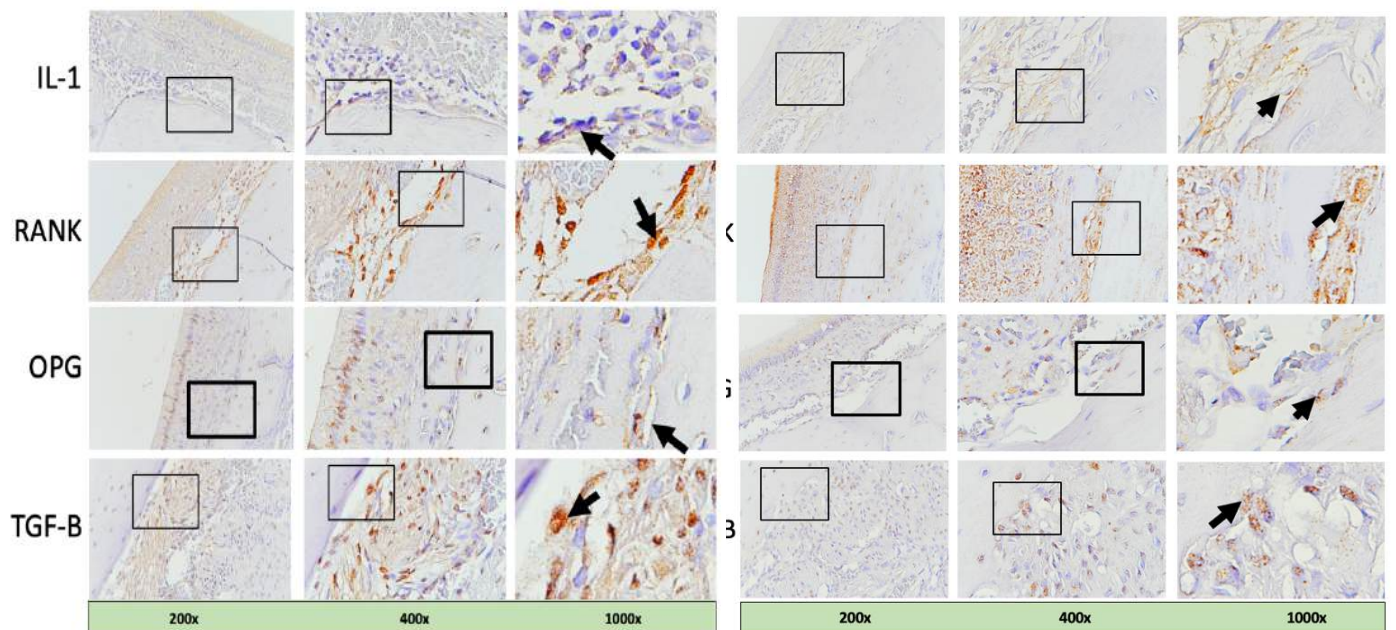
K1 (Gaya) hari ke-3

K3 (Gaya+etanol) hari ke-3



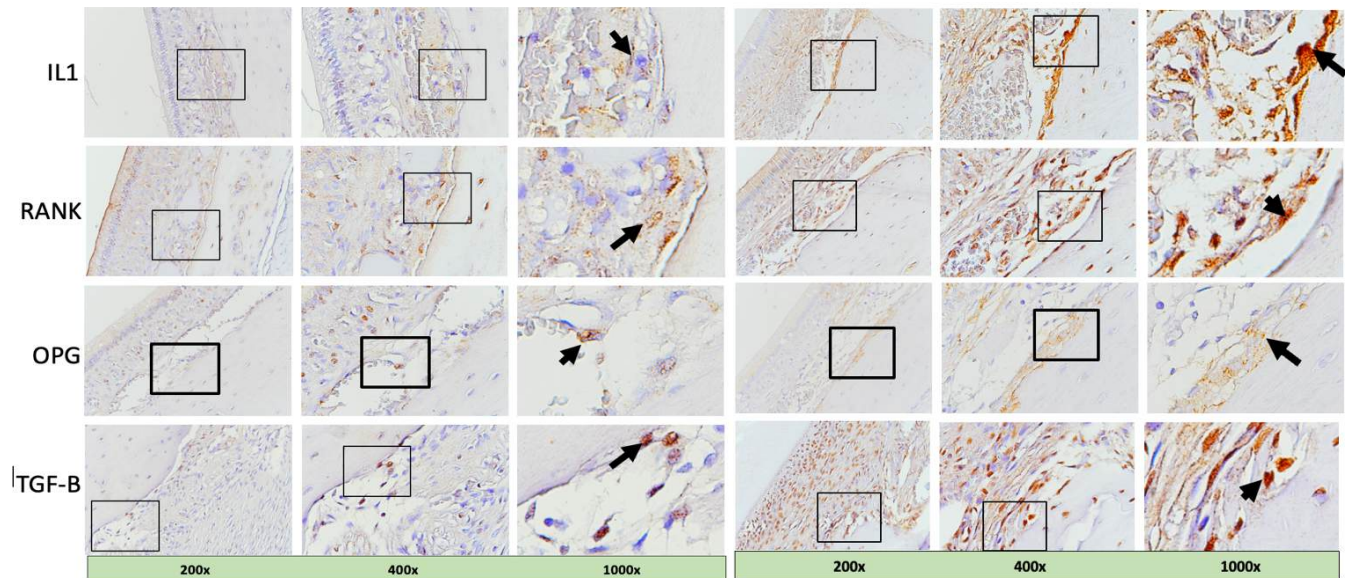
K1 (Gaya) hari ke-7

K3 (Gaya+etanol) hari ke-7



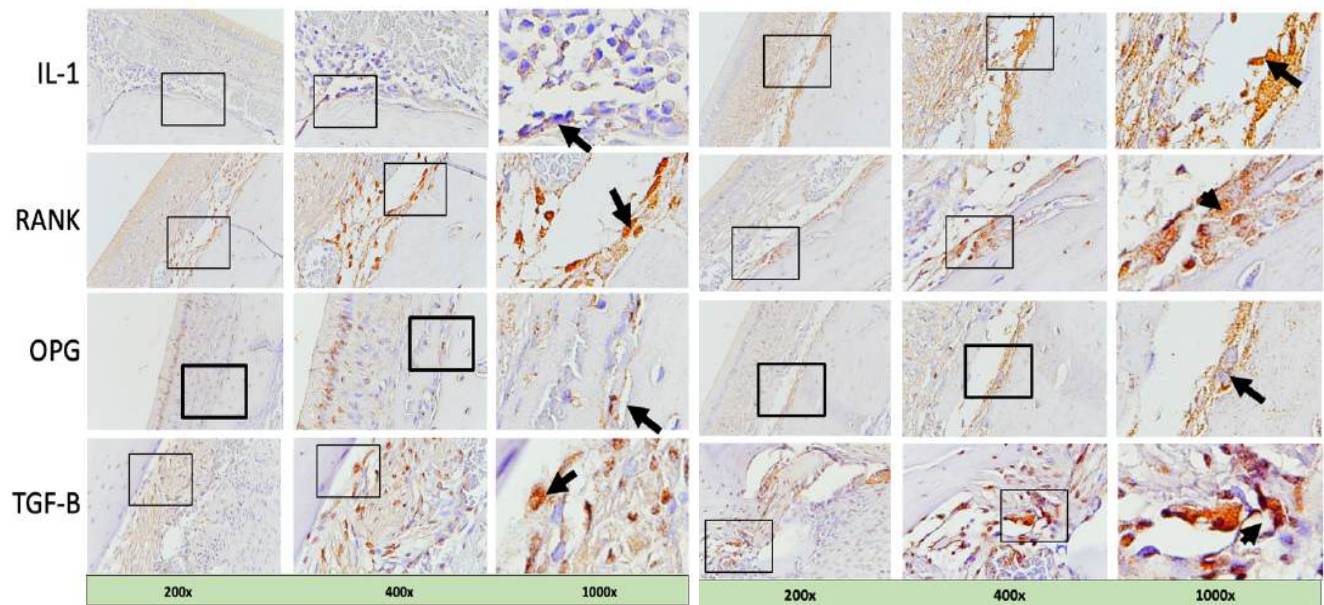
K1 (Gaya) hari ke-3

K4 (Gaya+kafein+etanol) hari ke-3



K1 (Gaya) hari ke-7

K4 (Gaya+kafein+etanol) hari ke-7





KEMENTERIAN PENDIDIKAN, KEBUDAYAAN, RISET DAN TEKNOLOGI
UNIVERSITAS HASANUDDIN FAKULTAS KEDOKTERAN
KOMITE ETIK PENELITIAN UNIVERSITAS HASANUDDIN
RSPTN UNIVERSITAS HASANUDDIN
RSUP Dr. WAHIDIN SUDIROHUSODO MAKASSAR
Sekretariat : Lantai 2 Gedung Laboratorium Terpadu
JL.PERINTIS KEMERDEKAAN KAMPUS TAMALANREA KM.10 MAKASSAR 90245.

Contact Person: dr. Agussalim Bukhari.,MMed,PhD, SpGK TELP. 081241850858, 0411 5780103, Fax : 0411-581431



REKOMENDASI PERSETUJUAN ETIK

Nomor : 420/UN4.6.4.5.31/ PP36/ 2023

Tanggal: 26 Juni 2023

Dengan ini Menyatakan bahwa Protokol dan Dokumen yang Berhubungan Dengan Protokol berikut ini telah mendapatkan Persetujuan Etik :

No Protokol	UH23050324	No Sponsor	
Peneliti Utama	drg. Ardiansyah S. Pawinru, Sp.Ort(K)	Sponsor	
Judul Peneliti	PENGARUH KAFEIN DAN ETANOL TERHADAP EKSPRESI INTERLEUKIN-1 (IL-1), RECEPTOR ACTIVATOR OF NUCLEAR FACTOR κ B (RANK), OSTEOPROTEGERIN (OPG) DAN TRANSFORMING GROWTH FACTOR- β (TGF- β) SELAMA PERGERAKAN GIGI ORTODONTI (IN VIVO)		
No Versi Protokol	1	Tanggal Versi	18 Mei 2023
No Versi PSP		Tanggal Versi	
Tempat Penelitian	Laboratorium FK Universitas Hasanuddin Makassar dan Laboratorium FK Universitas Brawijaya Malang		
Jenis Review	☐ Exempted ☒ Expedited ☐ Fullboard Tanggal	Masa Berlaku 26 Juni 2023 sampai 26 Juni 2024	Frekuensi review lanjutan
Ketua KEP Universitas Hasanuddin	Nama Prof.Dr.dr. Suryani As'ad, M.Sc.,Sp.GK (K)	Tanda tangan	
Sekretaris KEP Universitas Hasanuddin	Nama dr. Agussalim Bukhari, M.Med.,Ph.D.,Sp.GK (K)	Tanda tangan	

Kewajiban Peneliti Utama:

- Menyerahkan Amandemen Protokol untuk persetujuan sebelum di implementasikan
- Menyerahkan Laporan SAE ke Komisi Etik dalam 24 jam dan dilengkapi dalam 7 hari dan Lapor SUSAR dalam 72 jam setelah Peneliti Utama menerima laporan
- Menyerahkan Laporan Kemajuan (progress report) setiap 6 bulan untuk penelitian resiko tinggi dan setiap setahun untuk penelitian resiko rendah
- Menyerahkan laporan akhir setelah Penelitian berakhir
- Melaporkan penyimpangan dari prokol yang disetujui (protocol deviation / violation)
- Mematuhi semua peraturan yang ditentukan



KEMENTERIAN PENDIDIKAN, KEBUDAYAAN,
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UNIVERSITAS HASANUDDIN
FAKULTAS KEDOKTERAN
PROGRAM STUDI DOKTOR ILMU KEDOKTERAN

Jl. Perintis Kemerdekaan Km. 10 Makassar 90245 Telp. (0411) 586010, (0411) 586297
s3kedokteranunhas@gmail.com

SURAT PERSETUJUAN ATASAN

Yang bertanda tangan dibawah ini :

Nama : Dr. dr. Irfan Idris, M.Kes
NIP : 196711031998021001
Jabatan : Ketua Program Studi Doktor Ilmu Kedokteran

Menyetujui mahasiswa tersebut dibawah ini :

Nama : **Ardiansyah S.Pawinru**
Nomor Pokok : C013202038
Program Studi : Doktor Ilmu Kedokteran
Judul Penelitian :
PENGARUH KAFEIN DAN ETANOL TERHADAP EKSPRESI INTERLEUKIN-1 (IL-1), RECEPTOR ACTIVATOR OF NUCLEAR FACTOR $\kappa\beta$ (RANK), OSTEOPROTEGERIN (OPG) DAN TRANSFORMING GROWTH FACTOR- β (TGF- β) SELAMA PERGERAKAN GIGI ORTODONTI (IN VIVO)

Sehubungan dengan hal tersebut kami mohon kiranya berkenan memberikan izin persetujuan etik penelitian dengan menggunakan subyek manusia / hewan coba.



Makassar, 15 Mei 2023
Ketua Program Studi S3
Ilmu Kedokteran

Dr. dr. Irfan Idris, M.Kes
NIP. 196711031998021001



KEMENTERIAN PENDIDIKAN, KEBUDAYAAN,
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FAKULTAS KEDOKTERAN
PROGRAM STUDI DOKTOR ILMU KEDOKTERAN

Jl. Perintis Kemerdekaan Km. 10 Makassar 90245 Telp. (0411)586010, (0411)586297
s3kedokteranunhas@gmail.com

Nomor : 20279/UN4.6.8/PT.01.04/2023
Perihal : Permohonan Izin Penelitian

23 Agustus 2023

Yth.
Kepala Laboratorium
Biologi Molekuler dan Imunologi
Fakultas Kedokteran
Universitas Hasanuddin
Makassar

Dengan hormat kami sampaikan bahwa mahasiswa Fakultas Kedokteran Program Studi Doktor Ilmu Kedokteran Universitas Hasanuddin yang tersebut dibawah ini :

Nama : **Ardiansyah S Pawinru**
Nomor Pokok : C013202038
Program Pendidikan : Doktor (S3)
Program Studi : Ilmu Kedokteran

Bermaksud melakukan penelitian dalam rangka penulisan disertasi pada Program Studi Doktor Ilmu Kedokteran Fakultas Kedokteran Universitas Hasanuddin dengan Judul penelitian :
PENGARUH KAFEIN DAN ETANOL TERHADAP EKSPRESI INTERLEUKIN-1 (IL-1), RECEPTOR ACTIVATOR OF NUCLEAR FACTOR $\kappa\beta$ (RANK), OSTEOPROTEGERIN (OPG) DAN TRANSFORMING GROWTH FACTOR- β (TGF- β) SELAMA PERGERAKAN GIGI ORTODONTI (IN VIVO)

Sehubungan dengan hal tersebut kami mohon kiranya berkenan memberikan izin untuk melakukan penelitian di Laboratorium Biologi Molekuler dan Imunologi Fakultas Kedokteran Universitas Hasanuddin. Data yang diperoleh hanya digunakan untuk kepentingan penelitian dan akan dijaga kerahasiaannya.

Ketua Program Studi Doktor
Ilmu Kedokteran

Dr. dr. Irfan Idris, M.Kes
NIP. 196711031998021001

Tembusan Yth :

1. Wakil Dekan Bidang Akademik dan Kemahasiswaan FK Unhas
2. Arsip



KEMENTERIAN PENDIDIKAN DAN KEBUDAYAAN
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KOMITE ETIK PENELITIAN KESEHATAN

Sekretariat : Lantai 2 Gedung Laboratorium Terpadu

Jl. PERINTIS KEMERDEKAAN KAMPUS TAMALANREA KM.10, Makassar. Telp.0411-586010. Fax (0411) 586297.
Contact person dr. Agus Salim Bukhari, M.Med, Ph.D,SpGK (HP. 081241850858), email: agussalimbukhari@yahoo.com

LAMPIRAN 4

PENANGGUNG JAWAB HEWAN PERCOBAAN

Nama : drg. Ardiansyah S.Pawinru, Sp.Ort(K)

Judul Penelitian :

PENGARUH KAFEIN DAN ETANOL TERHADAP EKSPRESI *INTERLEUKIN-1*
(IL-1), *RECEPTOR ACTIVATOR OF NUCLEAR FACTOR κ B* (RANK),
OSTEOPROTEGERIN (OPG) DAN *TRANSFORMING GROWTH FACTOR- β* (TGF- β)
SELAMA PERGERAKAN GIGI ORTODONTI (*IN VIVO*)

Formulir isian diterima tanggal : 2023

Keputusan : Diterima ☒

Diterima dengan perbaikan
seperti terlampir ☐

Ditolak ☐

pada tanggal: 05/04/2023

Nomor Rujukan:

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Makassar, 5/04/ 2023

Penanggung Jawab Hewan Percobaan

Ketua

(Prof.Dr.drh. Ratnawati Malaka, MSc)