

Genetic interaction of *Thm2* and *Thm1* shapes postnatal craniofacial bone

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Supplemental Table S1. All Measurements with their Corresponding Significance

Measurement	significant as raw measurement	significant relative to centroid size	Type
Cranium Centroid Size	yes	-	Size
Mandibular Centroid Size	yes	-	
Snout angle	yes	-	
<i>Mid-anterior cranial vault angle</i>	no	-	Angle
<i>Mid-posterior cranial vault angle</i>	no	-	
<i>Anterior cranial vault angle</i>	no	-	
<i>Facial angle</i>	no	-	
<i>Palate arch angle</i>	no	-	
Premaxilla length	yes	yes	Antero-Posterior
Nasal length	yes	yes	
Facial region length	yes	yes	
Mandibular length (superior)	yes	yes	
Mandibular length (inferior)	yes	yes	
Upper jaw length	yes	yes	
Maxilla length	yes	no - $p < 0.057$	
Zygomatic length	yes	no	
<i>Anterior cranial base length</i>	no	no	
<i>Basisphenod length</i>	no	no	
<i>Presphenoid length</i>	no	no	
<i>Palate length</i>	no	no	
Palatal width	no	yes	Transverse
Inter-zygomatic arch width	yes	no - $p < 0.053$	
Inter-orbital width	yes	no	
Anterior nasal width	yes	no	
Inter-maxillary width	yes	no	
Inter-(1st)molar width	yes	no	
<i>Basisphenoid (rostral) width</i>	no	no	
<i>Inter-zygomatic root width</i>	no	no	
<i>Anterior cranial vault width</i>	no	no	
<i>Inferior frontal arch width</i>	no	no	
Mandibular posterior height	yes	no	Vertical
Ear height	yes	no	
Facial height	yes	no	
<i>Posterior nasal height</i>	no	no	
<i>Anterior pharyngeal height</i>	no	no	
<i>Anterior cranial vault height</i>	no	no	
<i>Frontal crest height</i>	no	no	
<i>Palate height</i>	no	no	

Measurements not shown

Supplemental Table S2. Euclidean and Projected Landmarks

Landmark Descriptions	Measurement type	Type
Midpoint mesial to maxillary incisors	Euclidean	Single
Anterior point at base of nasal aperture	Euclidean	Single
Nasion	Euclidean	Single
Bregma	Euclidean	Single
Lambda	Euclidean	Single
Mid-sagittal point of intersection of interparietal and occipital bones	Euclidean	Single
Medial premaxillary - maxillary junction	Euclidean	Single
Midline point on maxillary-palatal suture	Euclidean	Single
Posterior point on palate	Euclidean	Single
Anterior point on midline of presphenoid (junction with ethmoid)	Euclidean	Single
Intersphenoidal synchondrosis (mid-point of endocranial rostral margin of basisphenoid)	Euclidean	Single
Spine of ethmoidal crest	Euclidean	Single
Mid-point on interior crest of frontal bone	Euclidean	Single
Posterior inferior point on mandibular condyle	Euclidean	Single
Posterior tip of the angular process	Euclidean	Single
Anterior inferior most point on the body of the mandible	Euclidean	Single
Midpoint on alveolar bone lingual to the mandibular incisor	Euclidean	Single
Highest point at the top of the palate	Euclidean	Single
Anterior point on intersection of premaxillary and nasal bones	Euclidean	Paired
Intersection of maxilla, frontal and lacrimal bones	Euclidean	Paired
Anterior-superior point on zygomatic process of maxilla (lateral to infra orbital fissure)	Euclidean	Paired
Anterior end of zygomatic bone	Euclidean	Paired
Posterior end of zygomatic bone	Euclidean	Paired
Anterior point on base of zygomatic process of temporal bone	Euclidean	Paired
Posterior point on base of zygomatic process of temporal bone	Euclidean	Paired
Most prominent lateral point on frontal-parietal suture	Euclidean	Paired
Superior point on interior margin of external auditory meatus	Euclidean	Paired
Inferior point on interior margin of external auditory meatus	Euclidean	Paired
Lateral premaxillary - maxillary suture	Euclidean	Paired
Anterior point on palatine foramen	Euclidean	Paired
Crest of alveolar process (mesial to 1st molar)	Euclidean	Paired
Crest of alveolar process (distal to 3rd molar)	Euclidean	Paired
Posterior point on pterygoid process	Euclidean	Paired
Lateral point of endocranial rostral margin of basisphenoid	Euclidean	Paired
Superior-lateral point on interior crest of frontal bone	Euclidean	Paired
Midpoint mesial to maxillary incisors	Projected	Single
Spine of ethmoidal crest	Projected	Single
Anterior point on midline of presphenoid (junction with ethmoid)	Projected	Single
Spheno-occipital synchondrosis (mid-point of endocranial caudal margin of basisphenoid)	Projected	Single
Intersphenoidal synchondrosis (mid-point of endocranial rostral margin of basisphenoid)	Projected	Single
Posterior point on palate	Projected	Single
Midline point on maxillary-palatal suture	Projected	Single
Nasale	Projected	Single
Nasion	Projected	Single
Highest point at the top of the skull	Projected	Single
Highest point at the top of the palate	Projected	Single
Lateral premaxillary - maxillary suture	Projected	Paired
Anterior end of zygomatic bone	Projected	Paired
Posterior end of zygomatic bone	Projected	Paired

Anterior point on base of zygomatic process of temporal bone	Projected	Paired
Posterior point on base of zygomatic process of temporal bone	Projected	Paired
Superior point on interior margin of external auditory meatus	Projected	Paired
Inferior point on interior margin of external auditory meatus	Projected	Paired
Crest of alveolar process (mesial to 1st molar)	Projected	Paired
Crest of alveolar process (distal to 3rd molar)	Projected	Paired